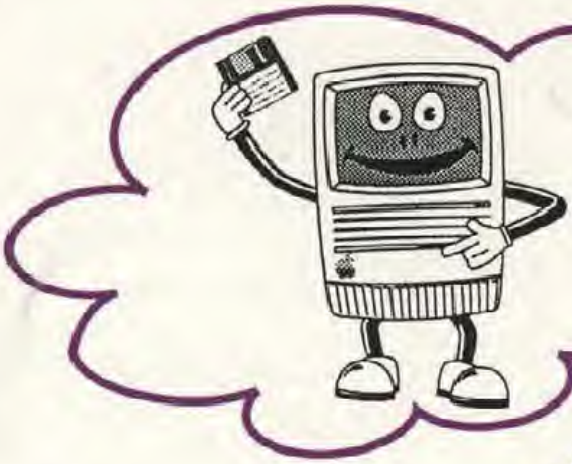
Apple2000

THE NATIONAL APPLE USERS GROUP

JUNE 1991

VOLUME 6(3)

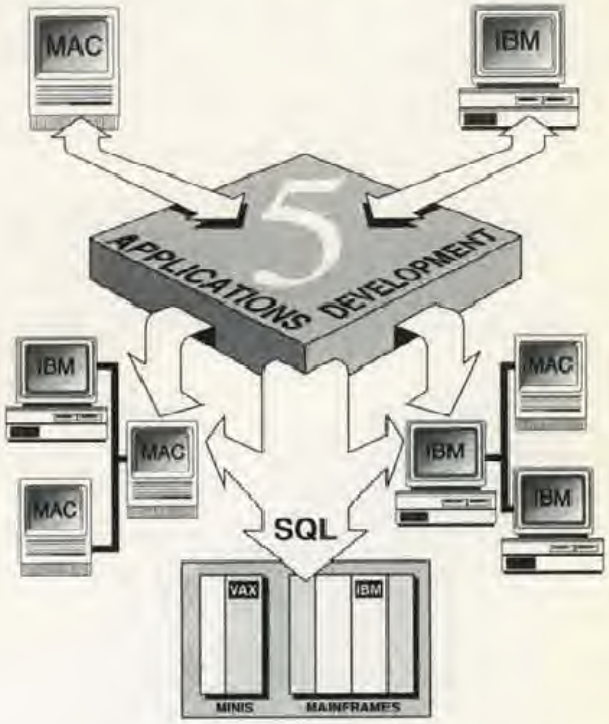
"Our goal is
to put Macintosh
in the hands
of as many people
as possible."
John Sculley



APPLE2000 RECOMMEND
SONY®
DISKETTES

Omnis 5 for Windows 3.0 accolade!

Did you know that Omnis 5 has been independently voted the 'Best Buy' windows database for PC's?



Yes it's true!

Omnis 5 IBM was voted the Best Buy'Windows database by PC Magazine in August 1990...ahead of Superbase 4.0 and nine other databases!!

Omnis 5 literally stands out head and shoulders above the rest of the field. It is a powerful 4GL, database manager and applications development system that can offer you total multi-platform compatibility. In other words business applications can be developed and run on your desktop - interchangeably on any PC or Macintosh.

When it comes to developing specific business applications, Omnis 5 is more and more the professionals choice.

For developers of bespoke or vertical market applications Omnis 5 provides a rich development environment.

Successive releases of SQL interfaces for Omnis 5 including SQLServer and ORACLE PC enables developers to bring mainframe applications development to the desktop.

Omnis 5 under Windows 3.0 offers you a graphic user interface, DDE, excellent on-line documentation courtesy of the Windows Help System, multiple open Windows, 'point and click' programming (though you can still use the keyboard if you wish), multi-platform compatibility and SQL, connectivity...all of which adds up to a highly productive, multi-user, integrated applications development environment and a compelling reason to make sure your people are trained on Omnis 5 for Windows 3.0.

Discover the benefits of this winning relational database management system for yourself. To receive your free Omnis 5 sampler pack;

Call or fax us today!

FREE PHONE
0800 289621

Or for further information
Call (081) 346 9999
or Fax (081) 346 1716.

BLYTH SOFTWARE

Omnis is a registered trademark of Blyth Holdings Inc. All other trademarks recognised.

Apple2000
The All Apple
User Group
Committed to
All Apple Users
including Macintosh

Apple2000

June 1991

Apple2000
P.O.Box 3
Liverpool
L21 8PY
[illegible]
Fax: [illegible]

CONTENTS

Chairman's Corner	Ewen Wannop	2
Letter Box		3
[illegible]	June Competition	9
AppleXtras ProDOS 8 and IIgs		10
Public Domain Software — a personal view	Richard W Shipley	11
Disk Zaps — Part 5	Ewen Wannop	13
Hotline News	Dave Ward	15
The Magic Machine — a book review	A J Robinson	15
The Apple IIgs — Mac LC — a personal view	Roger Wagner	16
Font Mavin D.I.Y.	Fred Greatorex	17
ProSel 16 - 8.67 — a review	Dave Ward	19
APC Uninterruptible Power Supply — a review	Dave Ward	20
Medley Version 2.0 — a review	Peter Stark	21
Tutor-Tech — a review	Terry Cymbalisty	22
Rastan GS — a review	John Kishimoto	23
GS/OS 5.0.4 — a commentary	Dave Ward	24
Salvation Wings — a review	Dave Ward	25
Library Update — new IIgs disks		28
Who famed Roger Wagner?	William Watson	30
SoftCat Corner	Jon Gurr	31
Applesoft Program Documenter — a review	Peter Davis	32
HyperStudio — Demo Kit		34
HyperStudio Resource Guide		35
The Nibbler Speaks	The Nibbler	38
CIM — a review	Ewen Wannop	42
StyleWriter — a review	Terry Cymbalisty	46
Ishido - "The Way of Stones" — a review	W G Littlewood	48
Info on System 7	Apple Computer	50
Claris Update	Claris	54
HyperMedia: The Multiple Message	Craig Ragland	60
Club Business — A.G.M. Minutes		65
Software Registration - Is It Worth It?	Mike Dawson	68
M3 CD-ROM set — a review	Peter Kemp	70
Story Editor and OverMatter — a review	Ewen Wannop	71
Twenty-five Tips for Excel 2.2 Users	Geoff Wood	72
AppleXtras Mac 9		76
Mac Library		77
Local Groups		78
Members' Small Ads.		80
Advertisers' Index		80

Apple2000 supports users of all the Apple computers. The **ITT 2020, I, II, II+, //c, //c, //c+, IIgs, IIgs+, ///, Lisa, XL, Mac 128, 512 MacPlus, Classic, SE, SE/30, Mac LC, II, IIsi, IIcx, IIci, IIx, IIfx** and the **Mac Portable**
Contributions and articles for the magazine are always welcome. We can handle any disk size or format. Please send to PO Box 3, Liverpool, L21 8PY

NOTE:
The front half of the magazine is mainly for the Apple II, Apple IIgs and Apple ///
The back half for the Macintosh and Lisa. Look for the descriptive page icons.

Key:

Apple II, //e and //c
Apple ///
Apple IIgs
Macintosh, Lisa
Macintosh II

There are a number of ways to contact Apple2000

If you wish to order goods or services from Apple2000 or just leave us a message, call Irene on [illegible] (Ansafone during the day). Alternatively you can Fax your order to [illegible] or write to the PO Box. If you use comms you can leave orders on TABBS addressed to the SYSOP or contact us on AppleLink (BASUG.1).

If you are experiencing problems with Apple hardware or software Dave Ward and John Arnold run the Hotlines and will try and help you.

We are very interested in the activities of local user groups, and if you have any information which you would like publicised John Lee would like to hear from you.

We reserve the right to publish, without prejudice, any advice or comments given to members as a result of letters received, in the journals of Apple2000.

A little praise for a few of our authors wouldn't go amiss. Send all comments, and contributions, via the PO box, especially suggestions about what you would like to see in **your** magazine.

Contact Points

Administration: Irene Flaxman
[illegible]

Apple II Hotline: Dave Ward
[illegible]
Mon-Fri 1900-2100

Macintosh Hotline: John Arnold
[illegible]
Mon-Fri 1900-2100

TABBS: Ewen Wannop - SYSOP
[illegible]
AppleLink: BASUG.1

Reviews: Elizabeth Littlewood
[illegible]

Local Groups: John Lee
Voice 0373 84861

TimeOut & ProSel: Ken Dawson
[illegible]

AppleWorks: John Richey
[illegible]

Chairman's Corner

Apple2000 1980-1991

System 7.0

System 7.0 is here at last, long live System 7.0! The hype has been around for some time and now we have a chance to see for ourselves what all the fuss was about. Hopefully it will be shipping by the time you read this.

If you rely heavily on your Macintosh as a productivity tool I would advise you not to install System 7.0 immediately. Wait till you have time to see that all is well before you commit yourself totally. It is not going to be the same as updating an existing system. You will find that many of your familiar applications will no longer work.

If you do decide to install System 7.0, first of all make a complete backup of your hard disks. I mean all your hard disks and have a copy of System 6.0.5 or later handy so you can reinstall the original system if necessary. A useful tip is to prepare a minimal system disk on floppy that you can use to reboot if the hard disk decides to hang. Read the manuals and installation guide packaged with System 7.0. Move all the Inits and DAs you have added to your system into a temporary folder. You can later try these out one by one and see if they still work. Now you can install ...

Once you have the beast installed you will find that some menu options have moved around, that familiar commands will have changed and the desktop has a new look. MultiFinder and AppleShare are a part of System 7.0 so are available at all times.

Be prepared for your favourite programs to suddenly stop working. There will be a rash of updates from the software houses as they try to keep pace with bugs and the new features. Claris have already announced two new products and two upgrades which support the new features of System 7.0.

If you do decide to go back to System 6.0.5 or 6.0.7 then boot up from the minimal floppy you prepared earlier and delete the entire System folder, the Trash and Desktop directories and then copy over your old system folder from your backup disks. You should now be back to square one. If your hard disk decides not to boot after this treatment you will need to reinstall from your master disks.

I am sure that Apple will not love me for saying this, but I feel that you need to put aside a day or so to change your system over and check out your applications if you decide to go to System 7.0!

Roger Wagner Day

There is a report of the excellent Roger Wagner workshop later in the magazine. Roger talked of many things at Bidmuthin but for me one of the most interesting points he made was to give his view on the future of the Apple II series.

You must remember he said that Apple are schizophrenic. On the one hand they wish to be at the leading edge of technology and business solutions and so will only think about and promote the Macintosh. On the other hand they are a company led by the shareholders on Wall Street. These shareholders will not let them throw away a turnover of several billion dollars a year that is currently brought in by sales of Apple II computers and peripherals.

He also pointed out that with the recent price cuts of the Macintosh range the profit margin on the Mac has been cut. As a corresponding cut has not been made to the Apple IIgs this now makes it the most profitable computer Apple sells! He predicted we will not seen the end of the II line for some time to come.

He has now sold over 10,000 copies of HyperStudio, a program that can make the IIgs into a true MultiMedia computer. He pointed out that you do not need to add anything more than a low cost Video Overlay card to link the IIgs to all of the peripherals that it takes many thousands of dollars to connect the Mac to.

Ewen Wannop

Annual subscription rates are £30.00 for UK residents, £35.00 for E.E.C. residents and £40.00 for other overseas members.

Apple2000™ is a trading name of BASUG Ltd, a non-profit making independent company limited by guarantee.

The contents of this journal are copyright of BASUG Ltd and/or the respective authors. Permission is granted for non-commercial reproduction providing the author and source are properly credited and a copy of the relevant journal is sent to BASUG Ltd. The opinions and views expressed herein are those of the various contributors, and are not necessarily endorsed by BASUG Ltd.

This journal is published bi-monthly by BASUG Ltd as a benefit of membership in February, April, June, August, October and December. The Apple Slices newsletter is published in the intervening months. The copy date is the 1st day of the month preceding publication. Advertising rates are available on request.

Apple™ and the Apple logo are trademarks of Apple Computer Inc. Macintosh™ is a trademark of Macintosh Laboratory Inc and used with the express permission of the owner. Telecom Gold™ is a trademark of British Telecom plc. Apple2000™, Apple Slices, AppleXtras, Mac2000 and The FORCE are trademarks of BASUG Ltd.

This issue was prepared using Aldus PageMaker™ 4.0, MicroSoft Word™ and Claris MacWrite™.

The Editorial team is:

Apple II	Ewen Wannop
Macintosh	Norah Arnold, Irene Flaxman
Reviews	Elizabeth Littlewood

Many thanks to all those who work behind the scenes and who receive no personal credit. These people are the stalwarts of Apple2000.

Additional thanks go to Val Evans for designing our front cover, and to Walter Lewis of Old Roan Press (051-227-4818) for our printing service.

Apple2000 are Founder Members and Wholehearted Supporters of the **Apple User Group Council**

Letter Box

Hadleigh
Suffolk

Dear fellow members.

My Backlit 4/40 Portable needs an accounting program that it's owner can work, and owner that has an understanding of basic accounting procedures but really hates doing any form of book keeping because the owner doesn't reckon it's real work well not creative work anyroad.

Fact is, the owner's inept when it comes to disciplining himself enough to daily enter all the junk: the orders, sales, expenses and VAT if it looks like hard yacka.

The owner's businesses are all small but need to be checked as often as the owner feels is necessary to know what the health of these enterprises is Generating orders and invoices is important too. And linking 'em all together would help my Portable tons.

Last of all my Portable wants a free or cheap book keeping program because it's owner has just forked out more than 2K on upgrading from a trusty ole' 512KE.

For under 1K on the open market there's Ritz for book keepers and Path for non accounting literates both costing about £440. Then there's Access which is just a cash book for £175. Last there's MacMoney 3 UK for £75 but needs InvoiceIt UK as an add on for invoicing for £65 making £140 in toto.

So how about it User 200 friends, what's out there in the electrosphere.

On behalf of a Portable, thank you very much.

Alastair Gordon Scott

❑ This is beyond my ken. As the Mac brigade are normally very silent in the pages of Apple2000, can you help us out with this one? Just some comments on what you use, or even an in depth analysis of what's on offer, anything to help Alastair!

Perhaps our Macintosh users do not read these pages thinking that nothing in the first half of Apple2000 might be for them. Come on, don't let the Apple II dominate the Letters page, write to us please!

The Editor

Kirkcaldy
Fife

Dear Apple2000,

Many thanks for a really great Magazine. I have now been a keen reader for nearly 3 years although this is the first time that I have ever written to you, or any mag for that matter. I have often read articles and thought comments that could have been written in reply but by the time I had found time to sit down and compose a letter the notion or ideas had gone. But a comment from Frank J Pycroft about the partioning of your magazine left me no option but to express myself right this very minute (or two).

First of all I have to explain that I've had an Apple computer, in one form or another, since about 1981, and my set-up has changed so many times in that period that I could not list them all here. What I am trying to say is that when I read your magazine and I come across an article on a gadget or program that I do not have, I skip it, (like the Mac half of the mag) but whenever I add something to my system then the first thing I do is get out all my Apple 2000's right from the start and look for articles, reviews, problems etc. on this subject or device. Now I do not know whether in the distant (or not so distant) future I might get myself a Mac, but this I do know that if I do get one, and the past is anything to go by, it will not be a new one with all the latest systems, upgrades etc. which means I will have to find out about all the quirks, upgrades and interface problems that other people have already had and overcome.

Not only this but I now have a peripheral which I have never seen mentioned in the II side of the mag, and that is a LaserWriter NTX printer. I have this connected to my IIgs using the AppleTalk and use PublishIt! 3 and AppleWorks GS as well as a few other pieces which have LaserWriter drivers. I must confess I was surprised at the number of software packages that actually support a laser printer but having found out this I now wonder how many more people out there have one linked to a IIgs or is it only Mac users.

Anyway, back to my original point, **PLEASE** don't think about shrinking your magazine - it's fine the way it is. I must admit I did get a bit sick of the Apple User mag in the last few months of its life, giving us nothing but Mac stuff, especially when they had a magazine of their own by the same publisher, but your magazine is well balanced and has enough interesting stuff in it to keep me in the loo half an hour longer than I need to be.

Alex Rollo

PS I am not very good at putting my thoughts in a coherent manner down on paper and this, along with the problem of not knowing which category my thoughts fall into or who do I address this comment to, have hindered me in writing before.

Is there not some kind of way whereby you could print in the magazine a sort of template of the kind of items you are looking for and the person to whom it should be addressed.

Also do you edit/rearrange or otherwise tear to bits items so that they make sense to the reader or does the thing get printed as we send it including all its gibberish, bad spelling and unintelligible mumbo jumbo.

I do not know if these comments themselves make any sense to you or if my suggestions would work but I feel that there could be a better response from your readers if something was done to encourage/prompt us to write.

❑ Great letter! Lots of comments and ideas there Alex.

First let me start by endorsing your comments about OUR magazine. It is OUR magazine of course as we are all fellow members and volunteers of Apple2000. There is no permanent staff at Apple2000 and the magazine, and all the other work of the group, is done by those who give up their spare time for this worthy cause.

If we were to split the magazine as Frank Pycroft had suggested, would we split it into two, three or five parts? The Apple /// is not an Apple II, the IIgs is not really a II either and the Lisa is not really a Macintosh. I also wonder

❑ If you have an urgent problem you should ring the Hotline to get help. Letters and Fax submitted to Apple2000 will normally be dealt with as part of the editorial content of the next magazine. We shall endeavour to answer problems if at all possible before publication, but due to the large volume of letters received this may not be possible in all circumstances. Please submit all letters and articles to the magazine on disk wherever possible. The disks will be returned to you when the magazine is published. If you have a modem, send us letters, articles and Public Domain programs either to 84:BSC001 or to TABBS [illegible]

what we do when a new Apple computer, with a new name, appears in a year or so? We shall leave OUR magazine precisely as it is, many members say they have an interest in all machines anyway.

You ask if we could publish some kind of a template to show what we want in the magazine. We do have a PageMaker 4.0 template which shows how the magazine is laid out, this is not of course one showing what we want, just how it should look. Anyone with PageMaker 4.0, and contemplating writing an article, may request a copy of the template. What you are asking for is really a list of things we would be interested in.

The simple answer is EVERYTHING and ANYTHING. We spell check all material before it goes in. We will edit if necessary and of course arrange and lay out the articles as needed. Typically an article will come to us as a disk file with possibly some printouts of any illustrations. We scan these where needed and put the whole thing together on the Mac.

We require articles on any subject and reviews on anything etc. etc. If there is a member out there who would like to turn their hand to reviewing, and would like to join our growing band of reviewers, I would suggest that you first submit an article so we can see the quality of your writing style. What I would suggest is that you take a piece of software that you know well, that has not been reviewed recently in Apple2000, and write about it from the point of view of an experienced user re-appraising the package. This will give us something of interest to other members and show us how you can write. You never know, you may end up reviewing the latest super duper, everybody wants to do it, multi faceted, Apple II/IIgs/Macintosh integrated program!

The Editor

Cranleigh
Surrey

Dear Apple2000,

I have a subscription to A+/InCider magazine and once in a while they publish something of real value to all GS users. I came across such a gem recently and would have written earlier but had to wait until I had time to make it work first. I once had PaintWorks Gold installed on my hard disk in the days when the operating system was GS/OS version 4. Despite its faults, PWG is an excellent graphics program especially when installed on a hard disk so that it can be accessed rapidly.

I then upgraded my hard disk to GS/OS version 5. The speed increase when loading AppleWorks GS was dramatic, but there was no way my PaintWorks Gold would work with GS/OS ver 5. If I wanted to use it it now had to be loaded from floppy.

I wrote to the authors Activision in the States explaining the problem and asking if there was an upgrade available or planned to cure the problem. They wrote me back a very sympathetic letter regretting that their owners Mediagenic had no such plans, and that they were very sorry.

Then a report appeared in A+/InCider which explained the PWG problem and the apparent cure. I spent ages trying to get the Basic program listed to work and it failed each time. Finally I decided to try the sector editor from Copy II Plus (something I normally avoid) and edit the Hexadecimal code. I found it surprisingly easy provided a few basic precautions are taken.

First I copied my PWG disk complete. I then used the copy and the sector editor. I used the search facility to locate the target Hex sequence quoted and after about two or three minutes the program listed the sequence and its sector. I then entered edit mode, changed the target code, from C9 08 00 D0 CE to C9 7F 00 D0 CE. Finally I wrote the modified sector back to the PWG copy disk. I then rebooted the system and started the modified PWG from my hard disk ver 5 Finder and all was now well. The last stage was to remove the old PWG from my hard disk and replace it with the modified version.

I hope this may be of benefit to anyone else with the same problem.

MJ Skipp

❑ Thank you for that patch. May I remind members this information must not be used to pirate copies of PaintWorks Gold. It may only be used to transfer legal copies of the program to your own hard disk.

The Editor

Pagham
West Sussex

Dear Apple2000,

I am currently planning on buying a hard disk drive fore my Apple IIgs. When looking through my Dads PC magazines I saw that hard disk drives for PC compatibles were much cheaper than for Apple computers. I was very pleased to see that Seagate SCSI drives without controller cards started at £150 plus VAT for 20mb. I was planning on getting roughly a 60mb drive then

The Apple Bulletin Board System

The Apple2000 Bulletin Board System

Speeds: V21 (300) to V22bis(2400) 8N1 24 hours
Modem: PACE Ultralink 32 using V42 LAPM MNP

❑ The TABBS message system is more than just a Bulletin Board. With a Shopping Mall where you can browse the Apple2000 catalogues and order the goods you require; a library with over 75mb of compressed files for the Apple II, IIgs and Macintosh; the NewsBytes™ news files updated weekly bringing you the latest in world computer news; a private and public E-mail service; file transfers that can be enclosed in private or public mail; message areas covering many topics including the Apple II, the IIgs and Macintosh; with Xmodem, 1k Xmodem (Ymodem) file transfers; multi-speed access at all common speeds; 24 hour operation; and much, much more make TABBS the premier Apple Bulletin Board serving Europe.
Give TABBS a call today!

```
>>>>> TABBS TOP MENU <<<<<

<#>Endcall <.>Utilities
<;>Time <G>oodbye

<1> Apple ][ folder
<2> Apple IIgs folder
<3> Macintosh folder
<4> Apple2000 folder
<5> Developers folder
<6> Public areas

<D>ownload Libraries
<M>ailbox
<N>ews Columns
<A>dvertisment Hoarding
<S>hopping Mall
<W>hat's new on TABBS
<H>elp files for TABBS
```

Ring **TABBS** on [redacted] at any speed through V21, V22, V23 to V22bis 8N1 V42 MNP
TABBS is available 24 hours a day

getting a SCSI card for the GS but I have heard that this can cause problems due to the fact that you do not get formatting software with it. Please could you tell me whether this method of getting a hard disk drive is worth doing in order to get a larger capacity for the same price as a 20mb GS specific drive. Also, could you tell me which is the best SCSI card to get with it and give me instructions on how to format it and use with GS/OS etc. so I can refer back when I get it. If I do not get one of these I would get a Vulcan 20mb drive as I would much prefer the convenience of an internal drive.

Are the labels to go onto the magazines printed in alphabetical order of the members surname? My surname is late in the alphabet and I receive my magazine after some other people and another member I know whose surname is very near the end gets his after me. I am asking this because I was very disappointed to find that Holdens had sold the 100mb Vulcan drive advertised in last months magazine a few days earlier. If you do send them out in this order is it possible to print them in a more random order if sending them out takes place over several days so in future any special offers go to anyone rather than the same people who get their magazine first every month.

Was the last Apple Slices Mac specific? I am asking because I found nothing related to the Apple II in it, and only the members small ads and news of the AGM were of any interest to me at all?

Jonathon Shippam

❑ Let me answer in reverse order.

Slices is made up of any material we have received between issues of the magazine. We only normally include news and letters in Slices and in some months there is just no Apple II news to be had at all. We are sorry you felt the March issue was only Mac specific, we shall try and do better next time round.

The address labels are indeed printed alphabetically, but the magazines are all posted at the same time. You will need to blame the Post Office on this one. My surname is almost last in the alphabet and it sometimes takes only two days and other times nearly a week for my copy to get to me. Perhaps there is a Post Office worker in Liverpool sorting the sacks of mail and making sure those with surnames late in the alphabet suffer!

Now to the hard disk question. New members joining Apple2000 do not have access to the back issues of the magazine. All of these points about hard disk drives have been covered over the last three years or so. As you have not seen those issues, and also for other new readers, I will go over the points again.

Yes, it could be a sensible solution to get a bare SCSI drive as you suggest. The best size to use on the Apple II is a 62mb drive. The reason for choosing that size is that it can be split into two partitions of 31mb each. ProDOS 8 can only see a 32mb maximum partition and also can only map partitions into two logical drives per slot. A drive larger than 64mb would mean some of it would be invisible to ProDOS 8. If you are only going to use your drive with GS/OS and never run any ProDOS 8 applications then you can choose any size of drive you like and create multiple partitions with ADV.DISK.UTIL.

If you do buy a bare drive you will also need to get a power supply and a case. Any PC type power supply will do as the power connectors are the same on all hard drives whether they are SCSI or not. You will need a power supply with at least 30 watts available. You will also need to get some 50 way IDC connectors and ribbon cable to connect the connectors to the drive. The drive itself takes a 50 way IDC connector and the outside of the box should have two 50 way Centronics type IDC connectors. You can buy cases from various sources. A2-Central for instance sells these parts as well as the drives. You can also try Derek Hughes at SeaGale. You will also need to get a 50 to 25 way SCSI cable and a Terminator. Apple2000 can supply those. It is wise to remove the terminator resistor packs from the SCSI drive and use an external terminator. This way you can expand on the SCSI chain later on if you need to. Remember that nearly all of this is included if you buy a ready made drive!

You will also need a SCSI card. The most versatile one on offer at the moment is the Apple High Speed DMA SCSI card. This will hook up to any SCSI drive, CD-ROM or Syquest cartridge drive. It also comes with a very useful piece of software, HDSCPARTITION. This will do all the formatting for you automatically. It low-level formats, partitions into two and high-level formats the drive in one pass. This answers your question about the problems of formatting the drive. The older version of HDSCPARTITION that came with the Rev C SCSI card does not do all these actions!

There are various forms of inner hard disk drive available. Cirtech of course do the InSyder drive on a card. This has a SCSI port as well so you can hook up further drives. However the SCSI connector expects standard external SCSI drives. It will not work with all of those on the market. You should check with Cirtech before getting any additional drives. The Vulcan powerpack/drive is not a SCSI drive but works fine with GS/OS. The Applied Ingenuity powerpack/drive (the company is now defunct) is a SCSI device and again works fine. There is an advantage to an external drive of course in that you can carry it around easily and hook it up to any other Apple II with a standard SCSI port!

The golden rule of course is that no drive you get is ever big enough. 20mb sounds a lot till you start to fill it up! I would suggest 62mb as a suitable starting point.

The Boffin

Bideford
Devon

Dear Ewen,

Several times over the last few months I have tried to contact TABBS with singular lack of success. On the occasions when I don't get BUSY, then my modem gets a warbling tone, I send a few CRs to establish speed, nothing happens for a while, nothing appears on the screen and then the modem hangs up and reports NO CARRIER. I have n problem with TelecomGold DialPlus and I had no problem (of that nature) with Compuserve while I was am member. I'm not sure what I'm doing wring, and perhaps you could advise.

Set up is Mac IIcx, Modem PACE Four 2400S, Com software DeskCom, set to 2400 Bd, Parity None, 8 bits, 1 Stop bit. ScanMan. CD. DeskWriter.

What I wanted to contact you about was the power start problem with the IIcx. I remember reading in Apple2000, I think towards the end of last year of the incipient problem of the Mac refusing to switch on, cured temporarily till next time by disconnecting the power lead for a minute or so. I remember that the article, I think in the correspondence columns, gave the cure - a resistor across some reservoir capacitor? - but I can't find the article. Can anyone help now that my IIcx is giving the identical trouble?

Can I also express my appreciation for all that you do for Apple2000 members, the ungrateful lot!

John Stanier

❑ That has brightened my day ... it has all been worth it after all even though my fingers are worn out typing in all these letters!

TABBS is now using the new PACE Ultralink 32 modem. This scans through all the baud rates that are available starting from 2400 down to 300. It also looks for LAPM and MNP error correction at the calling end. The cycle time on this scan is around 4 seconds. If your PACE Series IV also has the same cycle time, it may be that the baud rate it is just not coinciding at all during the scan period. Try setting your modem to a different scan period (S54=6 for instance). Also try setting your modem so it does not scan at all (S53=1 and S51=4 in your modem init string). You do not need to type any CRs to establish speed on TABBS and it is even possible that this might confuse things. Just wait till your modem and software locks on. The typing of CRs to establish speed was a hangover from the days when systems would respond to 150 baud using the

same carrier as 300 baud!

If none of those solutions works, contact PACE (0274 532000), and tell them you are having problems calling an Ultralink from a Series IV. They might be able to provide a solution for you.

I too have scanned the pages of Apple2000 and cannot find the reference to power supply problems on the IIcx. I have also checked out AppleLink Tech support and they have nothing either. The IIcx uses a self starting switched mode power supply. It could be that you are drawing too much power for it to start up by itself when switched on. Certainly your hard drive draws quite a bit of power on startup. I would check that all the connectors inside the IIcx are making good contacts.

If anyone can find the reference that is mentioned, please let us have it and we shall get it published again. Meanwhile you could also try your local Apple Service Centre, they may have some knowledge of this and can find a cure. If it is a known problem notified to them by Apple then they should be able to repair it for you despite the computer being out of guarantee.

The Boffin

Ridgeway
Sheffield

Dear Apple2000,

I have been using a //e for three years now, but would like some views on the Applied Engineering PC Transporter that Bidmuthin supplies to enable me to read and write MS.DOS disks. I use an Amstrad 1640 and a Tandon 386 at work, but need at times to work at home on MS.DOS system disks.

Eric Pritchard

❑ The PC Transporter card, as many will testify, is an excellent addition to the //c. It works very well indeed. However there are some points you might like to bear in mind.

1. It is not a cheap option to take. You need not only the Transporter card but an AE PC disk drive and a //e fitting kit as well.
2. You will only be able to use 5.25 360k MS.DOS disks unless you also buy an Apple 3.5 drive.
3. You can only emulate an IBM XT clone with CGA graphics. This may not run all the software from your Tandon 386.
4. There will only be around 750k of memory available to the XT so again you may have problems running some software.

To sum up. If you only require the equivalent of a standard XT PC with CGA graphics and 5.25 disks then the PC Transporter works fine. For anything more than that it is probably cheaper to actually go and buy a PC clone!

The Boffin

London
Via TABBS

Dear Ewen,

With reference to the query of Mr. Brian Gooch in the February '91 A2000, there are (or were) two versions of MANX AZTEC C for the Apple][+/][e/][c range. AZTEC C65 V1.0c runs under DOS 3.3 and AZTEC C65 V3.02b runs under ProDOS. I have used the latter.

Development is carried out under a UNIX like shell. Programs can run under ProDOS or the shell. There are linker options to wrap code around reserved sections of memory (eg: Graphics pages.), and a comprehensive overlay system is provided for the development of large programs. GRAY MATTER of Ashburton, Devon, should be able to tell you if these packages are still available.

Bryn Jones

Port Elizabeth
Republic of South Africa

Dear Editor,

This is a cry for help from across the world. I just hope some one can help me. I wrote to Pace Software, but my letter was returned so they have either moved or gone out of business.

I have an Apple //e with a Pace Mastercard and Nightingale modem which I purchased second hand, about 3 years ago from a friend. He had the instruction manual for the Nightingale modem but could not find the one for the Mastercard. The wiring into the 10 way plug on the connecting cord that plugs into the Mastercard was in a poor condition, so last month I took it to work and had it repaired.

We manufacture wiring looms for automobiles.

However although I was careful about the wiring connections, for some reason my modem will not work any more. When I do the self test in Terminal mode and type in letters at the keyboard, the red LED flashes green but nothing reflects back to the screen. Obviously one or more of the little terminals are in the wrong place.

Could you please let me know if I can obtain an instruction manual for the Pace Master Card or even just the connection diagram for the 10 way connector that plugs into it.

There are still a few dedicated Apple fans here in Port Elizabeth and we have a small user group going. However although new Apple products can be obtained with difficulty, our inflation has put most of it way beyond our pockets. The British pound used to be equal to two of our Rands, but today is worth five.

I managed to get an extended 80 column card, and an enhancement chip for my Epson 8132 card through MGA Softcat thanks to adverts in Apple 2000 and this has made life easier.

I hope that you can help me to get my modem working again.

Drew von Bratt

❑ PACE have indeed moved and now have the address:

PACE Micro Technology Limited,
Victoria Road,
Shipley,
West Yorks,
BD18 3LF,
England.
Tel: 0274 532000
Fax: 0274 532010.

The connections for the Mastercard to the Nightingale are as follows:

1. TRANSMIT DATA
2. RECEIVE DATA
3. RTS
4. CTS
5. GROUND
6. DCD
7. DTR
8. SPARE
9. SPARE
10. +5V (Via 1k ohms)

Looking at the solder connections of the 5 pin domino plug going to the Nightingale, connect as follows viewing with the cutout to the top:

Centre pin GROUND
Common Ground
Top Right RECEIVE DATA
Data Out from modem (connect to 2 on MasterCard)
Bottom Right TRANSMIT DATA
Data In to modem (connect to 1)
Top Left RTS
Handshake (connect to 7)
Bottom Left CTS
Handshake (connect to 6)

The Boffin

Cleveland
Yorkshire

Dear Apple2000,

As a new starter in computers I have no idea what I shall require in Software, I'll need guidance and advice on this issue. I have just purchased Quick File from MGA, it was secondhand, I have it working (but) there was no sample disk with it, the information that I now have on disk I cannot get my printer to work with it, the book gives reference to Silentype or Qume. Mine is a Panasonic KXP 1081/2. I got it to work with my photography: equipment, slides and prints, also with the video camera equipment with information lists ref. weddings and portrait work so now you see what I mean about my need for advice. There may be some-

thing in the PD libraries that will help me.
G. Elliott

❑ Secondhand software is always a problem. The vendor may not actually have or be able to supply all the disks required. In many cases such software is now so out of date that the original publisher may no longer exist. We can only hope that one of our members may be able to help you out with any missing disks.

There were so many printers, interface cards and programs in the early days that it is a nightmare trying to thread your way through the jungle. It was much like the IBM PC world of today! The Silentype was a thermal printer that Apple sold at the very beginning. The Qume was a fairly standard printer and I would have thought that your Panasonic would be very similar to software. If the Quick File program requires custom printer drivers, and none of the supplied ones work with your printer, you may have great problems in getting the thing to work at all.

Try phoning Dave Ward on the Hot Line. Dave will get back to you if he is not available when you call, and he may be able to help you thread your way through the jungle you have found yourself in.
The Editor

Wellington
New Zealand

Dear Apple2000,

There are a few things I would like to ask concerning the Club. First the "Shop2000" brochure gives a price of £3.50 for a single disk. Does this mean that for each disk from the Public Domain Library that I order I will be required to pay that price inclusive of postage to NZ?

Next, the descriptions in the Library List are somewhat brief (understandably) however it makes it a little hard to judge their usefulness. Is there a more comprehensive description in another publication?

Last, I possess a Singaporean Apple][+ clone called "Cubic 99". It has an 80 column card and a 128k expansion card and operates very well on all usual Apple][+ software. I would like to use later versions of AppleWorks than 1.3 modified with "PlusWorks" as well as other packages such as "Print Magic" and "Multiscribe". All these packages require a //e and/or 128k but my card is in a different slot to the norm (5 in the Cubic) and is not recognised. Is there any way I can physically modify my machine to operate as a //e or is there some software package I can obtain which would allow my machine to be re-configured. I would rather not dispose of the unit as it is very convenient having an IBM style keyboard as well as two inbuilt disk drives. I would rather extend it's RAM but naturally I would not do so if I cannot make any use of the extra RAM by utilising the software I have mentioned.

I do hope that you will be able to offer some practical suggestions and loom forward to hearing from you in due course.
Alan A Hart
PS. The memory card cannot be moved to another slot as the slots are in two lines not one as in the straight Apple.

❑ I am afraid I have not much good news for you.

The library disk are £3.50 each which includes VAT and Post and Packing. We of course do not have to pay the VAT for overseas members but this is offset by the increased postage to send abroad. We are often reminded that media costs are much less than the cost of a library disk but remember we have overheads to consider as well. We must acquire and store the original software and also keep a duplicate library for archival purposes. We also have administration costs of paperwork and credit card charges and the cost of disk mailers. All this makes a price of £3.50 the minimum we can go to and not lose money on selling library disks.

Many of our older library disks have been handed down to us. We just do not really know what is on them. It would be a mammoth task to sort them out. We can only offer them to members on an "as is" basis. More recent additions to the library are usually documented in the Apple2000 magazine when they are announced.

You have I see one of those rare beasts, an Apple][clone. You may not be aware but there is a fundamental difference between the //e and the][+. The //e has quite a different architecture internally to the][+ and the 128k of memory in the //e is not addressed in the same way as memory in the][+. Adding extra memory to a][+ cannot create a //e whichever slot you put the memory in. This special memory in the //e is used for the 80 column screen of the //e. For this reason software written specifically for the // e cannot run on a][+.

You will also have another problem with your clone. ProDOS, the current preferred operating system, is programmed to reject any computer that does not have an Apple operating system ROM. It may well fail on your machine if it has its own operating system ROM.

You therefore cannot alter your computer to become a //e. You would need to purchase a proper //e to run the software you mention. The only exceptions to this rule are the earlier versions of AppleWorks which can run on a][+ when modified with PlusWorks. But they run with a much reduced workspace. Extra RAM in the][+ will not help solve this problem as it just will not be in the right place.
The Boffin

Longlevens
Gloucester

Dear Apple2000,

As owner of a second-hand Apple II Europlus computer outfit and purely a novice operator, I have encountered a small problem in the limited time I have had to get to know the computer and I would appreciate any advice that could be given on the matter.

"Omnivision" was included with my purchase, enabling "word processing" to be carried out. After encountering difficulties loading the program I was able to get it on screen and commence operations.

Composing a basic letter, with address and information format completed, the text proceeded until the computer decided to beep, back-slash, and revert to a fresh start. A study of the Apple tutorial reveals that the computer does this after about 240 characters.

I would not have expected this to exist within the Omnivision mode, since composing a basic letter or report demands continuous use until the letter or screen is filled to capacity. Is this significant of a fault in the Omnivision software, or does the computer need particular attention? Would an up-to-date software package edit out this peculiarity if I made a further purchase?

Your advice would also be appreciated on the following topics:

(a) What is required to obtain higher K values.

(b) What is required to operate with a domestic C.T.V. monitor.
D.R. Lyes

❑ I am not familiar with the 'Omnivision' package. From your description it seems to be line entry based and obviously very limited as a word processor. There are no up to date packages which will run on the Apple II as all the newer pieces of software are written to run on the //e. However it is still possible to pick up a secondhand copy of AppleWriter. This is an excellent wordprocessor and should provide all you would want. AppleWriter however exists in various versions so make sure you do not get the //e one. You will require AppleWriter 2.0 for the II+.

If you do not already have a 16k RamCard in Slot 0 of your II+ then you should get one immediately. This will allow you to use the various DOS movers which give more space for Basic to operate and will also allow you to run ProDOS. There is not much point in increasing the memory beyond the basic 48k plus 16k RamCard as most programs just would not see this extra RAM. The various RAM cards available which range up to 128k are usually only seen by specialised software.

If you intend expanding the capability of your II+ further, I would seriously suggest trying to get hold of a //e rather than continuing with your II+. The //e is more versatile and will run

all of the new and up to date software.

You can of course connect your II+ to TV through a VCR directly. The colour output of the II+ is NTSC colour and this will not display on European TV's. You would need to add a PAL colour display board to give colour on a domestic TV. Be warned, the colour is not very good if displayed in this way and is even worse if connected to a TV monitor having a composite video input. Colour output from the II+ is only achieved by the smearing effect caused by the low bandwidth of a domestic TV. CTV monitors having high bandwidth just do not generate colour successfully. An alternative is to add an RGB colour card to your II+. This will drive an RGB monitor with a much improved colour display. If you have a TV with a SCART socket you can hook up the RGB output from one of these cards to the SCART connector.

The Boffin

AppleLink:
CUMB.COMP

Dear Ewen,

I thought you might like to know these points about the new printers :

1) The installers for both the StyleWriter and Personal LaserWriter LS sometimes report that you need to upgrade to system 6.0.7 to use the new printers when you are already running 6.0.7. Using the 'Custom' installer gets round this problem.
2) The StyleWriters come shipped with a 13A fuse fitted in the plug, I believe that 3A is the largest that should be used with the size of cable fitted. Also, the cable is 'only just' secured properly in the cord grip.

The StyleWriter life is around 6000 pages, and around 500 pages per cartridge. Taking this into consideration it gives a running cost of about 7.2p per page (excluding paper).

On a per page basis it is expensive but for personal users who want a low cost, high quality printer it is ideal.

Simon Hobson

CROSSWORD - SOLUTION

■	C	O	M	P	R	E	H	E	N	S	I	V	E	■
E	■	■	E	■	I	■	■	■	A	■	N	■	■	A
X	■	■	E	G	G	■	T	■	M	A	C	■	■	P
T	E	N	T	■	O	L	I	V	E	■	H	E	L	P
R	■	I	■	P	R	O	M	I	S	E	■	N	■	L
A	R	B	O	R	■	T	E	E	■	L	A	D	L	E
P	■	■	P	O	P	■	R	■	G	E	M	■	■	C
O	■	D	E	F	E	R	■	C	O	V	E	R	■	O
L	■	■	N	E	W	■	S	■	T	A	E	■	■	M
A	M	I	S	S	■	U	L	E	■	T	R	A	M	P
T	■	L	■	S	T	R	A	N	G	E	■	L	■	U
I	S	L	E	■	I	N	T	E	R	■	S	P	O	T
O	■	■	S	O	B	■	E	■	O	D	E	■	■	E
N	■	■	A	■	I	■	■	■	W	■	A	■	■	R
■	E	D	U	C	A	T	I	O	N	A	L	L	Y	■

❑ No-one had the correct solution to the February Crossword so the prizes remain unclaimed.

Compuserve®

❑ We have asked you all to send us your Compuserve/Forum ID's. Please send us your ID's either to the Apple2000 ID 76004,3333 or to the PO Box in Liverpool or of course to the Sysop of TABBS (0225-743797).

Apple2000	76004,3333
John Beattie	100012,360
David Collins	100016,3060
Michael Dawson	100015,2232
Gary Doades	100016,2353
Felim Doyle	100016,1151
David Evans	100014,1161
Mateen Greenaway	100016,602
Dale James	100016,1152
Bryn Jones	71307,1457
Mark Hooper	100014,374
Richard Kelly	100029,177
Peter Kemp	100016,1172
Elizabeth Littlewood	100016,401
John Maltby	100014,2216
Mark O'Neill	100016,476
Steve Perry	100013,365
Jeremy Quinn	100016,560
John Richey	10006,1037
Russell Ridout	72007,211
Arthur Robinson	73457,3614
James Southward	73767,1336
Ahmet Turkistanli	100016,3365
Donald Walker	100015,256
Andreas Wennborg	100012,342
Ewen Wannop	76224,211

AppleLink™

❑ Many of you will already be members of AppleLink™ and others may be thinking of joining. For simple E-Mail it cannot be beaten. It will also keep you up to the minute with what is happening at Apple headquarters. We would like you to send us your contact ID's to add to this list.

Apple2000	BASUG.1
Cumbrian Computers	CUMP.COMP
Herts User Group	NA.HERTSUG
Liverpool Group	LIVERPOOL.UG
Mosaic Computers	MOSAIC.COMPU

Help Lines

❑ Members having offered specialist help facilities are listed below:

A.W. Harmer (Mac) [illegible]

Mr Armstrong (Apple II+, IIgs) [illegible]

John Richey (AppleWorks) [illegible]

Ken Dawson (TimeOut, ProSel) [illegible]

June Acrostic

Rules of Engagement

The first correct entry drawn from the postbag wins first prize. Please remember to indicate which of the two prize choices you would like.

Only entries from current members of Apple2000 will be eligible.

No member of the committee or the editorial team may enter.

Our decision will be final.

Only entries received in the PO box in Liverpool before the 31st of July will be deemed eligible.

How to Contact You

Name: .....

Membership Number: .....

Address: .....

.....

.....

Post your completed entry to:

June Competition,
PO Box 3,
Liverpool,
L21 8PY.

Choose Your Prize

Please indicate which prize you would like. TutorTech (Hypermedia for Apple II), Battle Chess for the IIgs or LOC a Macintosh game.

☐ TutorTech - 5.25 disk

☐ Battle Chess - 3.5 disk

☐ LOC

Apple2000 prize competition

Apple-pie Order

The initial letters of the solutions spell out the name of a book and its author. The solutions when transferred to the bottom diagram will show a passage from the book.

A A royal fish for a doctor taking tea (8)
B Facetious name for a tooth-puller (8)
C Remove insulation from a French convict (5)
D And one thousand in caper was an outstanding event (8)
E Swagger around hospital for wedge (5)
F A hundred and fifty from disaster suggests friendship(5)
G Heart palpitations: a number give fibre (6)
H Youngster passing test is rebuked (4)
I A funny wall (4)

J Try to write a composition (5)

K Comment cleverly, unusually (10)
L To dissemble about gold is alien (7)
M House-work is a ring (4)

N Blues a naughty boy would prefer not to have (5,2,3,4)
O Spencerian version of regret (3)
P Ask of princess without hesitation (3)
Q Wrap up some green folder (6)

R Station is open, less loud (4)

S Fat model permit (6)

8	51	101	45	74	21	33	107																	
86	16	79	4	111	24	94	36																	
9	70	115	44	50																				
19	6	75	65	90	55	83	57																	
43	109	87	17	5																				
26	38	114	58	47																				
99	12	61	68	97	88																			
56	14	37	22																					
63	31	2	113																					
105	42	98	64	89																				
30	62	25	91	46	93	15	66	104	81															
27	76	112	110	73	102	34																		
59	95	13	54																					
53	48	35	23	7	106	77	28	52	39	84	67	72	108											
92	3	40																						
78	29	103																						
60	49	96	71	85	80																			
100	18	69	10																					
1	41	20	32	82	11																			

1	2	3	4	■	5	6	7	8	9	10	■	11	12	13	■	14	15	16	■	17	18	19	20	
21	22	■	23	24	25	■	26	27	28	29	30	■	31	■	32	33	34	35	■	36	37	38	39	
■	40	41	42	■	43	44	45	46	47	48	49	50	■	51	52	53	■	54	55	56	57	■	58	
59	60	61	62	■	63	64	65	■	66	67	68	69	■	70	71	■	72	73	74	75	■	76	77	
■	78	79	80	81	■	82	83	■	84	85	86	87	88	89	■	90	91	92	93	94	■	95	96	
■	97	■	98	99	100	101	102	103	104	105	■	106	107	■	108	109	110	■	111	112	113	114	115	

AppleXtras

/XTRAS.P8.NO.9/

```
=PINBALL.SHK        LIB     100  9-MAR-91
=CRIBBAGE.SHK       LIB     137  7-MAY-91
=IIPLUS.UNSHRINK    LIB      26 28-MAR-91
```

/XTRAS.GS.NO.9/

```
=PRODOS             SYS       34  20-AUG-90
=BOOT.SYSTEM        SYS        1   6-JAN-90
=TITLE              PIC       65   7-MAY-91
=FONTS              DIR        2   7-MAY-91
   =CHADWELL.SHK      TXT      120  29-DEC-90
   =LONDON.SHK        TXT       20  30-APR-91
   =EDMONTON.SHK      LIB      110   9-MAR-91
   =MADISON.SHK       LIB       75   7-MAY-91
   =FONT.LSTR         BAS        8  17-NOV-90
   =READ.ME           TXT       11  17-NOV-90
=UTILITIES          DIR        1   7-MAY-91
   =TRANSPROG.SHK     LIB      245  16-APR-91
   =DESK.ACCESSORY    DIR        1   7-MAY-91
      =NEXT.NDA.3        NDA      117   4-APR-91
      =FMANAGER          DIR        1   7-MAY-91
         =FILE.MANAGER      NDA       90   4-FEB-91
         =FM.DOC            TXT       76  25-JAN-91
         =FM.REG.FORM       TXT        4  25-JAN-91
         =READ.FIRST        TXT        6   4-FEB-91
      =SOLITAIRE         DIR        1   7-MAY-91
         =SOL.DOC.AWP       AWP       14  10-DEC-90
         =SOL.DOC.TXT       TXT       13  10-DEC-90
         =SOLITAIRE         NDA       83  10-DEC-90
      =KEYFIND.DA        DIR        1   7-MAY-91
         =KEYFIND.DOC       TXT       17  10-APR-91
         =KEYFIND           NDA       69  10-APR-91
      =DATAPATH.DA       DIR        1   7-MAY-91
         =DATAPATH.DOC      TXT       18   8-APR-91
         =DATAPATH          NDA       25   8-APR-91
   =SHR.VIEW          DIR        1   7-MAY-91
      =SHR.VIEW          SYS       20  24-MAR-91
      =SHR.VIEW.CONFIG   BAS        4  24-MAR-91
      =SHR.VIEW.DOCS     TXT       15  24-MAR-91
      =SV.UPDATES        TXT        7  24-MAR-91
   =SYSTEM.INITS      DIR        1   7-MAY-91
      =GRAFSPEED         DIR        1   7-MAY-91
         =GRAFSPEED.SETUP PIF        1  12-NOV-90
         =INIT.DOCS         TXT        3  15-NOV-90
         =SHADOW.SETUP      PIF        1  12-NOV-90
         =READ.ME.TOO       TXT        3  19-APR-91
      =GS.SPY            DIR        1   7-MAY-91
         =GS.SPY.2.DOC      TXT        9  22-APR-91
         =GS.SPY.2          PIF       22   2-APR-91
         =GS.SPY.2.ICON     ICN        4  14-MAR-91
      =TWO.BORDERS       DIR        1   7-MAY-91
         =TWO.BORDERS       PIF        3   8-APR-91
         =TWO.BORDERS.DOC   TXT       11  10-APR-91
      =IDL               DIR        1   7-MAY-91
         =IDOL.DOCS         TXT        9  14-MAR-91
         =IDOL              TIF        4  13-MAR-91
         =IDOL.PATHNAMES    TXT        1  13-MAR-91
=GAMES              DIR        2   7-MAY-91
   =ANTETRIS          S16       29  16-DEC-90
   =ANTETRIS.DATA     BIN      159  16-DEC-90
   =ANTETRIS.SCORE    BIN        1  17-APR-91
```

❑ We are beginning to see this month the results of a swing to the IIgs in the States. There just is not the same number of programs for the //e and the II+ filtering through the system. Nearly all we find now is for the IIgs!

/XTRAS.P8.NO.9/

PINBALL.SHK
Unpack to make three Pinball game programs. You will need to reboot when you have finished playing.

CRIBBAGE.SHK
Pack of seven games which include cribbage, card games, Tower of Hanoi and other games of skill.

IIPLUS.SHRINKIT
The latest version 2.0 of Shrinkit for the II series. Is there no end to these updates?

/XTRAS.GS.NO.9/

Fonts Directory

CHADWELL, LONDON, EDMONTON & MADISON
A collection of four fonts for use with IIgs word processors and programs

FONT.LSTR
A useful program for keeping track of all the fonts you have collected.

Utilities Directory

TRANSPROG.SHK
Version 2.2 of the TransProg program launcher. Unpack to a disk. The disk also includes Font.DA.v2.0 and a utility to control your TransWarp accelerator.

Desk Accessory Directory

NEXT.NDA.3
An amazing directory lister and program launcher. Brings the NeXT computer to the IIgs!

FMANAGER
A useful NDA that allows you to move, copy, delete, find, view and manage your files from the desktop.

SOLITAIRE
Bored with your slow spreadsheet, have a game of Solitaire while you wait!

KEYFIND.DA
The KeyCaps of the IIgs. Shows you how to find those hidden keys.

DATAPATH.DA
Sets up defined paths to the standard prefixes on program launching.

SHR.VIEW
Slideshow program which displays virtually any kind of picture you may find on your disks. It will also display 32000 colour pictures.

System Inits Directory

GRAFSPEED
Init to speed up scrolling of list windows in the Finder.

GS.SPY
Monitors disk activity on the screen. Useful for inner drives which have no disk access light.

TWO.BORDERS
Preselects the colours of your choice for the borders of the SHR screen.

IDL
Mounts desk accessories from external drives or other than the usual Desk.Accs directory on boot.

Games Directory

ANTETRIS
A Tetris like game for the IIgs. See how high a score you can get!

❑ We are now well into our second series of Xtras disks. Some members have only joined Xtras part way through the year. In some cases they will not have the necessary tools to be able to UnShrink and deal with the files on the disks.

For this reason we recently issued a Toolkit on a 5.25 inch disk. We now find that some IIgs owners do not have a 5.25 drive. We have therefore issued a IIgs Xtras Toolkit. Check out under the new disk releases later in this magazine.

Public Domain Software

Richard W. Shipley gives a personal view on a thorny subject

Since I bought my Apple //e computer in 1984, I knew very little of Public Domain Software. I joined Apple 2000 in 1988/1989 and was sent a list of The Public Domain Software which they issued on the intro disk they sent to me. It consisted of a list of disk numbers and programs with no explanations. This didn't mean much to me so I decided not to bother and filed it away. A little while later I received unsolicited a catalogue of Public Domain Software from "Kingsway Computer Services". Like the Apple 2000's list it was just names of programs with no explanation. I started to throw it away but then I hesitated, the bumph said, "When you receive Public Domain disks you will not receive any printed documentation. Documentation comes as a text file on the disk which you can print out or read on your computer screen." The disks were priced £4.00p each or ten for £35.00p, so I took another look at the catalogue and selected 10 disks with program names that sounded interesting. I filled out my order form and sent it off. The ten disks duly arrived. I unpacked them and retired to my study to boot up and try them out.

The first thing I noticed was that explanation text files were few and far between. The second thing I found was that many of the programs were corrupted, some to the point that they needed to be completely rewritten. An example of this is on a disk headed "Apple 10 Business" a program called "STOCKMARKET FORECASTER", it took many months of rewriting to get that program up and running, and a program called "STOCK VALUATION" on the same disk just did not exist at all. In spite of the fact that when the disk was catalogued it showed up. I wrote to Kingsway complaining of this and sent back the disk asking for a correct replacement. Some weeks went by with no word - I wrote again - still no reply, so I wrote a third time demanding a refund - I got a reply this time in the form of a replacement disk and a "with complements" slip - this disk had the same corruptions as the one I sent back. I gave up after that and decided that that P.D.S. wasn't worth it! I was very annoyed by the fact that many of the programmes I was interested in didn't run properly, all programmes were heavily American orientated and very badly written.

I then bought, second hand, a copy of "Beneath Apple DOS". I was interested in the example programmes it featured. I had noticed that the Apple 2000 P.D.S. Library list had a disk with those programs on so I sent for it to save my fingers. When the disk came I booted it up and immediately noticed a difference with this disk to ones I had received from Kingsway. To start with the HELLO programme ran a programme launcher which made running the programmes easier. I also found several other programmes that were of use and that ran without my having to "doctor" them. I came to the conclusion that maybe some P.D.S. was worth having after all.

I thought that I would try P.D.S. from other sources. I looked through Apple 2000's magazine for any adverts of P.D.S. I saw an advert for 'COMPUTABILITY' in Southampton and sent for their catalogue which came a couple of days later. It was set out completely differently to both Kingsway and Apple 2000's catalogues. Each disk named had a short

Clocktower

84a Weston Park, Crouch End, London, N8 9PP

Phone & Fax: 081-341 9023

Callers welcome, but please phone first.
Add £5 carriage to any goods less than £150.
Add 17.5% VAT to these prices - Apple 2000 members deduct 10% from the final total. VISA & ACCESS accepted. Prices and offers are subject to availability and are subject to change without notice.

Lower prices on Beagle, TimeOut & Appleworks Products

UltraMacros Primer	16.00	TimeOut Thesaurus	31.00
Platinum Paint	61.00	TimeOut UltraMacros	37.00
Outliner	43.00	MacroEase	24.00
SuperFonts Activity Guide	31.00	GS Font Editor	31.00
Companion +	31.00	MiniPix 1,2 or 3	19.00
AW 3.0 Companion	23.00	Program Writer	31.00
TimeOut TextTools	31.00	Beagle Compiler	46.00
TimeOut DeskTools I or II	31.00	Point-To-Point	61.00
TimeOut FileMaster	31.00	BeagleWrite GS	61.00
TimeOut Graph	55.00	GS Desk Accessories	37.00
TimeOut PowerPack	31.00	Clip Art vol 1 or Font Lib vol 1	31.00
TimeOut QuickSpell	43.00	BeagleDraw	55.00
TimeOut ReportWriter	48.00	BeagleWrite	49.00
TimeOut SideSpread	31.00	Desk Acc, Pic Mgr, FontPaks	25.00
TimeOut SpreadTools	37.00	Dos.Master or PRO.CMD	17.00
TimeOut SuperFonts	43.00	Double Data	19.50
TimeOut SuperForms	43.00	FlexiCal	18.00
TimeOut TeleComm	43.00	I.O.Silver, Late Nite, PathFinder	12.00

Prosel 16, manual, text editor & many new features 55.00
Prosel 8 (5.25") 26.00 Prosel 8 (3.5") 24.00

Toolbox/FTA - Photonix II £29 - Bouncing Bluster £38 - Space Shark £32 - Gate £35

GS Memory enhancements - DMA compatible
RAMPro - 0k £57 ◆ 1Mb £117 ◆ 2Mb £176 ◆ 4Mb £292
CVTech (can use existing Apple card) - 0k £80 ◆ 1Mb £140
Applied Engineering - GS RAM II 1Mb £140 ◆ GS RAM Plus 1Mb £190 ◆ GS Ultra 1Mb £209 ◆ Cirtech Primo 1meg £130

TRANSWARP GS OWNERS - 32K UPGRADE
User installable £80
NEW! TransWarp GS 32k complete £280
Original 8k £210

ZIP CHIPS FOR ALL MODELS
ZIP GSX 1500 7Mhz 8k £170 ◆ ZIP GSX 1600 8 Mhz 16k £220
ZIP GSX 1800 9Mhz 16k £280 ◆][+ and IIe ZIPs - call

APPLIED ENGINEERING
Authorised Dealer
DL-X WITH FAX + MNP5 £245
DATALINK MODEMS FROM £160
3.5" 1.6Mb DRIVE £240
3.5" 800k DRIVE £170
HD upgradeable,][+ & //e needs controller card £55
READYLINK COMMS £55
PCTRANSPORTER FROM £245
RAMFACTOR 1 Mb £215
RAMWORKS III 1 Mb £185
IIc Z-RAM ULTRA 2 1Mb £235
IIc Z-RAM ULTRA 3 1Mb £265
IIc RAM EXPRESS II 1 Mb £195
VULCAN DRIVES 20 Mb £400
40 Mb £545 100 MEG £995
PARALLEL PRO £69
SERIAL PRO £105
IIGS POWER SUPPLY £84
//e POWER SUPPLY £70
//e TRANSWARP £85
Call for catalogue & other items

Syquest R45Mb Cartridge drive £490 including one cartridge. 80Mb removable soon! Spare cartridges - call.
Hard drives - from 40Mb @ £275 to any size/price

Clip on battery for GS £13.75 inc. VAT & post

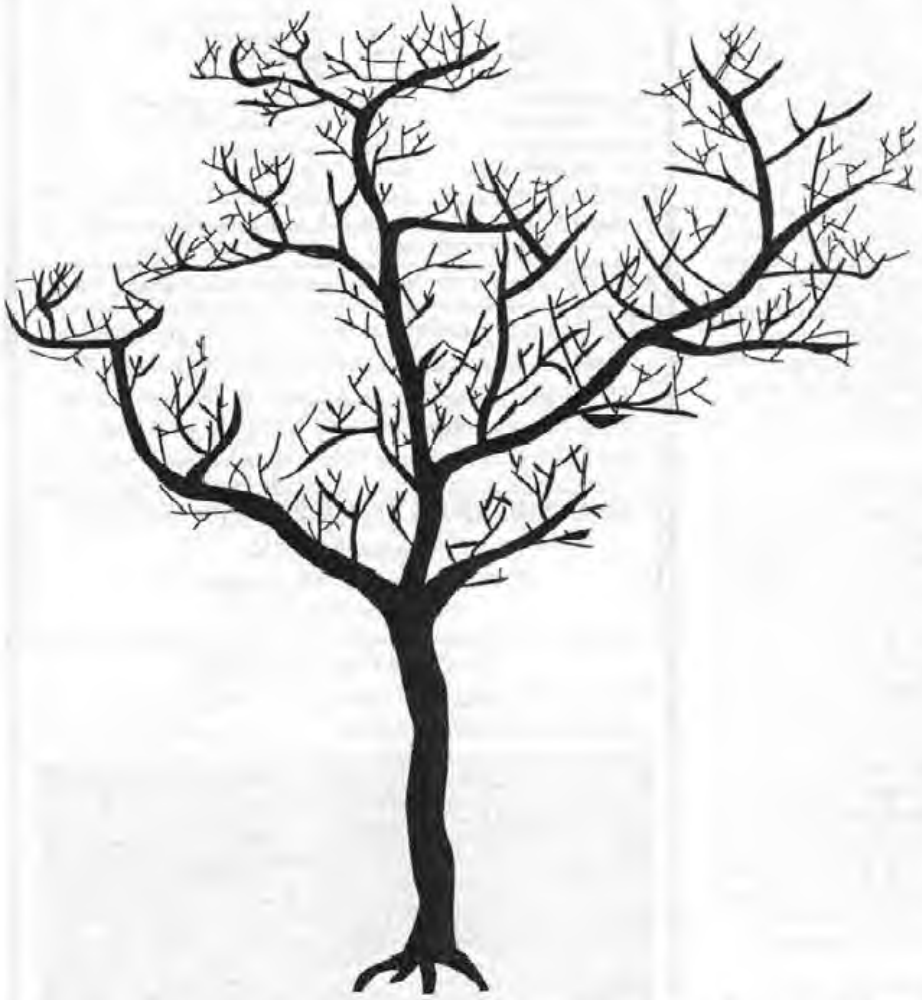
Full range of Cirtech products please call

We supply a range of ribbons, discs, fax machines and rolls, etc., originals & quality compatible at surprisingly low prices. Laser & copier toners, original and Blueprint remanufactured (note NOT refilled) £55. See other advertisement or call for more information.

AMR 3.5" drives £140 (gives 800k on Apple II & 1.4Mb on Mac)

NEW! APPLE REPAIR SERVICE - CALL

resume of the type of programs rather than just a straight list of program names. Program names do not always mean much to the prospective purchaser because although relevant, they do not always indicate what the program is supposed to do. Another point in their favour was that the computer configuration was stated i.e. Runs on IIe, IIc, and Laser 128, does not run on IIgs; and their disks were priced at only £1.50p each. I selected four disks and sent off my order. They arrived within a few days of my posting the order. When I looked at them on my computer my first impression was pleasant surprise.



The first disk was a shareware WORD PROCESSOR, written, it was claimed, by the author of APPLEWRITER][program and running under PRODOS. This worked very well and was very well documented with four text files of information on the disk which could be viewed on screen or printed out using the word processor itself. It had both 40 col and 80 col screen format available with adjustable printer width settings of up to 120 columns with right to left scrolling if this was set wider than the screen width.

My next choice was a suite of stock market programs called P.V.ELVES. This was somewhat disappointing to start with. I booted the disk and was presented with a request for the date as my computer didn't have a Thunder Clock installed. The program was menu driven. The first menu consisted of a list of seven memory configurations, an initialise & format option and Quit. I selected my configuration, Apple with extended 80 col card and pressed return. The program immediately bleeped, and told me, "THIS APPLE HAS NO EXT'D 80 COL CARD" and reset itself to "64K, 128+ A.E. RAM CARD" which I accepted. Having entered a configuration that was acceptable, the program repositioned 'DIVERSI DOS' and displayed the 'Main Menu'. My first few attempts at running this program proved unproductive as the lack of data files caused the program to crash. With a little perseverance however I was able to find my way around the program.

My third choice was a disk entitled "OTHELLO". This largely contained a version of the game and a teaching program for the game called "OTHELLO STRATEGY", plus a game of "BACKGAMMON" which when run, set out a board on the Hi-Res screen and played very aggressively - and I suspect that it cheated with the dice rolls, as they come out very much in the computers favour. There were also several other programs on this disk including a demonstration sort program with an entertaining Hi-Res graphics display included.

My forth choice was a set of AppleWriter //e Utilities all written in W.P.L. with ample explanation of how to use them. For someone with a copy of AppleWriter //e this is a very useful disk to have.

So after after sampling some of the better end of the P.D.S. market my opinion has drastically improved. I think anyone on a low budget should investigate P.D.S. software but beware!! order a sample disk first from a couple of sources and decide if what you are buying is of a reasonable quality for the money you are paying.

Richard W Shipley

❑ I think Richard's experience may well be typical of many of our members.

Apple2000 receives many hundreds of programs a year from many different sources. With limited time at the disposal of the volunteers running the libraries it is usually not possible to do more than check the things work, sort into categories, and place them into the various libraries.

Much of the newer software does come with Help files or Document files and so will be self explanatory. The older material that is on the early disks, and this especially applies to the older DOS 3.3 software, may not be documented at all. We can only offer it as it stands hoping it may be of use to someone. Newer material is more often than not fully documented.

Pricing library disks realistically has always been a problem. A disk may only cost 30 pence but a mailer costs over 40 pence, postage is usually around 35 pence, and there are also the overheads we have to pay in just acquiring and storing the library material in the first place. Add VAT to all of that and you can begin to see why Computability could not continue at the prices they were charging and went out of business at the end of last year.

We have continued to supply all the older material in our libraries on the basis that you will be buying it unseen. Where possible with new issues we give further descriptions in the magazine that the disks have been announced.

The Xtras scheme was started last year in an attempt to provide you with the very latest PD and Shareware material in an easily digestible bimonthly slice. These disks are always descrivbed fully in the magazine linked with that issue.

A certain amount of knowledge must always be assumed in dealing with material issued in the libraries. We have recently issued ToolKit disks on both 5.25 and 3.5 format to help handle the Xtras programs.

Ewen Wannop

Disk Zaps and all that (part 5)

Let your fingers do the walking .. Ewen Wannop explores the ProDOS Directory

As you will have already seen, ProDOS is considerably more powerful than its predecessor DOS 3.3. It has a greater flexibility built in to itself, and has very few rigidly defined values in its disc structure. This allows devices of very different kinds to be easily attached. Most devices will however follow the normal structure that we see on a standard 5.25 inch disc. I have not yet had experience of a 3.5 inch Unidisk drive, so the following notes refer mainly to the structure of a 5.25 inch disc. The required information is there however, for you to see how any other device is handled.

If you are using a DOS 3.3 disc zap, such as DISK MANAGER from the library, you will need to translate the ProDOS block numbers into DOS 3.3 sectors. Refer to article number 4 in the April issue of Apple2000.

The Block structure

Blocks 0-2 on a ProDOS disc are unique. Block 0 is the boot image needed to load ProDOS. Block 1 is reserved for, but need not contain, a boot image for SOS on an Apple ///. Block 2 is always the first block of the ProDOS directory, and contains all the pointers necessary to define the disc structure. The first block of any directory, whether the main Volume directory or a Sub directory, is also unique in its construction. It may also be the only block, if required, to save disc space.

Each block of any directory has the first four bytes 0-3 reserved for pointing to the other blocks in that directory. The first two, 0-1 point backwards, and the second pair, 2-3 point forwards. If either of these pairs is zeroed, then it indicates the end of the chain. So the first block will always have the first two zeroed, and the last block will always have the second pair zeroed. A directory with only a single block, would have both pairs zeroed.

Pointers to the Blocks

You will find that in every case where a block number is to be pointed to, there will be a pair of bytes. This allows block numbers up to 65535. Remembering that blocks have 512 bytes of data, this gives a possible volume of 32 megabytes. Quite ample for most purposes!

The next $27 bytes of the first block are rigidly defined, and describe the Volume Directory Header. This is then followed by the file entries, which are usually $27 bytes long, but as you will see may be of any length. These bytes are defined as follows. For convenience I will refer to their offset from the start of the block, ie. the first byte of the entry will be offset $4.

OFFSET $04 Storage type and name length. The top four bits describe the entry type, in this case $F as it is a volume directory. The bottom four bits are the length of the Volume name, this means a maximum of 15 characters.

$05-$13 Volume name of length pointed to by previous byte. Max 15 bytes. Garbage fills the rest of the entry. All volume and filenames are entered with the Hi-bit off.

$14-$1B Reserved. Usually zeroes.

$1C-$1F Date and time of creation. Zero if no date was written. The bytes are a packed form of the date. Each bit has the following representation:
BYTE 0-1 yyyyyyymmmmddddd
year/month/day
BYTE 2-3 000hhhhh00mmmmmm
hours/minutes
These bytes should be read with the highest bit to the left, so the y/m/d has byte 1 as the yyyyyyym part and byte 0 is mmmddddd.
The sequences of bits should be read as a two byte HEX number 4th July 1986 at 6 minutes past noon will therefore look like this:
In decimal 86/7/4 12/6
In binary 1010110/0111/00100 00001100/00000110
In Hex $ACE4 $0C06
This gives four bytes 0-3 of $E4 $AC $06 $0C

$20 Version number of ProDOS under which the disc was formatted. Under ProDOS 1 series, this has a value of 0.

$21 The minimum version of ProDOS that can access this volume. Usually zero.

$22 Access byte. The bits refer to the access rights to the file. If set the bits are as follows:
Bit 7 - Volume may be reformatted
Bit 6 - Volume may be renamed
Bit 5 - Volume directory has changed since last backup
Bit 1 - Volume directory may be written to
Bit 0 - Volume directory may be read
All other bits reserved

$23 Entry length of each file entry in the directory. Usually $27.

$24 Number of entries in each block. The header is included in this count. Usually $0D.

$25-$26 The number of active entries in the volume directory. The Volume header is not included, but any subdirectory entries are.

$27-$28 This points to the first block of the volume bit map. Usually block 6.

$29-$2A The total number of blocks on this volume. On a 5.25 inch disc this will be $0118 or 280 decimal. It is used while computing with the disc map.

Using the value gained from the 'entry length', usually $27, we now see the filename entries ranged sequentially through the block. Remember that a block is two sectors long and should be considered as one long block of $200 bytes. You will need to wrap the entries from one sector to the next to span the break. Each filename entry is structured in a similar way to the Volume directory header. I give the offsets in this case from the start of the entry.

OFFSET $00 Storage type and name length. The bottom four bits are the length of the following filename. The top four bits refer to the type of storage of this entry:

$0 - Deleted entry, may be reused
$1 - Seedling file, only one block
$2 - Sapling file, 2-256 blocks
$3 - Tree file, 257-32768 blocks
$D - The file is in fact a subdirectory
$E - This is a Subdirectory Header
$F - This is a Volume Directory Header

$01-$0F Filename. 15 byte max.

$10 Filetype. There are a potential of 256 file types.... Some 30 are defined between the SOS and ProDOS systems.
The main ones are:
$04 - TXT file in ASCII
$06 - BIN file
$0F - DIR Directory file
$1A - AWP AppleWorks word processing file

$FC - BAS Applesoft Basic file
$FF - SYS ProDOS System file

$11-$12 Pointer to either the data block of a seedling file, or the first index block of any other file. If a subdirectory entry, then it points to the first directory block.

$13-$14 The total number of blocks used by the file including any index blocks. If a subdirectory then the total number of directory blocks.

$15-$17 Three bytes to give the position of the end of file. This is the length of a sequential file in bytes. This gives a maximum size of 16 megabytes to a file. This will not give the correct length of a random access file.

this file.

The Power of ProDOS

As you will now have seen ProDOS really is an extremely powerful system. It holds much more information in its directory than any other disc system for the Apple II. It is interesting to note that Subdirectory entries look like actual file entries. In fact this flexible construction runs through the whole system. There is a considerable amount of echoed structure, subdirectories for instance are virtually the same as the main directory. The directory itself is seen as a file by ProDOS and it is possible to open and read a directory from the MLI as though it was itself a file. This is the method you would use if you wished to display a Catalog from a program. ProDOS itself does not actually provide this function.

$18-$1B Creation date and time encoded as before.

$1C The version number of ProDOS that created this file.

$1D The minimum version of ProDOS which can access this file.

$1E Access rights to the file. Bit assignments as follows:
Bit 7 - The file may be deleted
Bit 6 - The file may be renamed
Bit 5 - The file has altered since the last backup
Bit 1 - The file may be written to
Bit 0 - The file may be read
All other bits reserved
In an unlocked file that you can read and write to this will be $C3

$1F-$20 Depending on the file type, these two bytes will represent various parameters.
TXT - Random access record length
BIN - Load address of the binary file
BAS - Load address of the program
SYS - Load address of the System program, usually $2000

$21-$24 Date and time of last modification.

$25-$26 The block number of the Directory Header block that describes

The Index Blocks

The files themselves other than a single block seedling file, will always have one or more Index blocks. As of course ProDOS does not know the length of file until it is closed, you will find that the first block reached on free disc space, will always be a data file. On any other file than a seedling file, ProDOS will need to provide pointers to the other blocks, and so makes a sapling file by creating the first Index block. It then follows this block with further data blocks. If the Index block is filled up, then a tree file is needed and more Index blocks must be added. A Master Index block is then created to point to all the Index blocks, and the directory altered accordingly to show a tree file. The two byte pointer to the key block will now point to this master index block. An Index block itself is interesting in its construction. It must of course consist of pointer pairs to block numbers. However to make programming easier, the least significant byte is placed in the lower half of the block, and the most significant byte in the same position in the upper half.

All the data blocks of files are constructed in the same way, there are no bytes describing length or load address as in DOS 3.3. The hi-bit is not normally set on text files. There are however some peculiar file constructions amongst the special file types. Have a look at an AppleWorks AWP text file for example.

Thats all for now

I was going to discuss the MLI in this article, however I think you have had plenty to digest so far, so will leave it till next time. However I will just briefly describe its use. Those of you who have used DOS 3.3 through machine language, will know how tedious it is actually do anything with files this way. ProDOS avoids all of this by the magic MLI or Machine Language Interface. By making a simple call to the MLI at $BF00 with various defined parameters, you can open and read files, alter file name entries and much more. There is even block read and write command, the ProDOS version of the beloved RWTS routine from DOS 3.3. In reading a file, you may define the load address. It is this that gives ProDOS its speed, as the data is dumped where it is needed, it does not need to be copied over as DOS 3.3 has to do.
Happy zapping ...

Ewen Wannop

Postscript:
This article was written before the advent of the IIgs. To cater for the changing and increased needs imposed by larger disk drives and the needs of the advanced GS/OS operating system, some minor changes have been made to the directory entries of a GS/OS disk.

Some of the unused bytes are now used for additional information needed by GS/OS. A new Auxiliary filetype has been defined and filenames will now display in upper and lower case. There are also many new filetypes defined and there are also files which have both data and resource forks.

One limitation of ProDOS, which does not follow Apple's own rules, is that you can only have 51 files in the top or main directory. There is no limit within a subdirectory. Normally this would not be a problem, but AppleWorks has a nasty habit of corrupting a disk or losing data if you try and write that 52nd file! If you write many files under AppleWorks, it would be wise to create a subdirectory first and write all your files in there.

A 3.5 inch disk and hard disks are constructed in exactly the same way as the 5.25 floppies described in the article. You will need to use a disk zap program like Copy II+, ProSel BlockWarden or Bag of Tricks II to access these devices. Disk Manager mentioned in these articles was written under DOS 3.3 and just will not see anything other than a 5.25 disk.

Ewen Wannop

Hotline News

Corrupt AppleWorks files.

From time to time I get questions regarding AppleWorks files, both Wordprocessor and Database, that will not load into AppleWorks due to 'getting errors' message. I've had four such enquiries this year alone so some comment seems appropriate.

AppleWorks files contain internal pointers to other information in the file and if these pointers are damaged AppleWorks can no longer find the relevant data in the file and so comes up with the aforementioned message 'getting errors' in loading the file. These files are difficult to deal with but some clever people have devised programs that will read through the AppleWorks file and try to put the pointers right.

Unfortunately only one such enquiry required this sort of solution, but I'll tell you about the programs never-the-less since I'm sure that they may be useful.

The best that I have seen are two utilities by Harold D Portnoy which are ShareWare programs. The ShareWare versions of the program have limited facilities. Full versions are available on payment of the ShareWare fee.

We included the two ShareWare versions, CHANGEFILE and RESURRECT on our Xtras.P8.No.4 disk. This can be obtained from the library in the usual way.

The main program is CHANGE.FILE which has the main menu listed below:

CHANGE-A-FILE V. 3.00

Q- Quit
X- Convert AWP 3.0 to 2.x
W- ... AWP File to TXT File
T- ... TXT File to AWP File
D- AWP File Doctor
E- Exhume AWP File
R- Restore ADB File
V- View File (TXT, AWP, etc.)
F- Change File Type/Aux. Type/ Access Code
L- Strip Line Feed after Carriage Return
C- ... All Control Characters
S- ... Specified Control Character
I- Insert Line Feed after Carriage Return

I can state, however, that E & R work extremely well in repairing AWP and ADB files, even those that are very badly damaged.

The main problems that I have found are due to the corruption of the catalog blocks on the diskette almost certainly caused by ProDOS itself. I reported some time ago that if there isn't enough space on a diskette to save an AppleWorks file then that file will become corrupted and further attempts to use the diskette only make matters worse!!

Basically all the file names are in the catalog blocks but their pointers to the block lists are corrupted and so your files are just a collection of blocks of data which may not be contiguous. If the ProDOS delete command has been used the block pointers may have just been reversed and can relatively easily put back. It is a good idea to have Block Warden and a copy of Beneath Apple ProDOS to hand in solving this.

I have had very good success rates by re-creating the block list and then connecting the pointers in the catalog. The file can then be copied to another diskette. After restoring such a file a used the Resurrect program from the listing above. This program allows one to view all the blocks on ones damaged data diskette and copy them to another diskette. As they are copied the program actually re-creates a new file! The file that I produced would still not load into AppleWorks but by using the Change.file program a perfect retrieval was obtained.

PFS File:

Do you remember PFS file? Well this program was an extremely popular 'flat file' published in the early to mid 1980's. The problem was that the authors must have felt that nobody would ever want to use any other database because they would only allow the database to be stored in a most unusual format on pascal formatted 5.25" diskette. A ProDOS version appeared in 1985 but there did not appear to be any conversion utility from the old to the new!! Now that AppleWorks database is the favoured system users have wanted to transfer their PFS database to AppleWorks - but they cannot.

Eric Sausse recently wished to transfer a number of PFS file data diskettes to AppleWorks database. He found that CALL A.P.P.L.E published a little Applesoft program in September 1986, by Wes Felty, that would automatically read PFS data diskettes and produce an AppleWorks database file on another volume. After taking the immense trouble to type in the listing he found that it 'bombed' after transferring a number of records. Both Eric and I are convinced that there must be a bug but are unable to find it. Carefully reading later editions of the CALL A.P.P.L.E magazines has not unearthed any bug fixes.

Do any readers have a perfect working version of this program, called PROVERT.2, or any other utility that will do the job? Another alternative is that some version of the ProDOS based PFS file may have had a converter from Pascal to a ProDOS version.

Bidmuthin and Roger Wagner:

Early in April 1991 Roger Wagner rang to say that he would be holidaying in the UK for a fortnight starting on Saturday 27 April 1991. To get his holiday off to a good start he wished to present HyperStudio to a user group preferably on the April 27. Ewen Wannop and Steve Morrisby of Bidmuthin Technologies got together and quickly arranged to put on the 'Roger Wagner show' at Bidmuthin's office in Harrow, Middlesex.

Roger Wagner is an excellent showman and Steve Morrisby the provider of a gourmet buffet but you'll read all about that in William Watson's report elsewhere in the issue of Apple 2000 magazine. All I wish to do here is to extend thanks to those who made the day possible:

Huw Price, Mark Whelan and Steve Morrisby all of Bidmuthin technologies. Ewen Wannop and of course Roger and Pam Wagner.

Dave Ward - June 91

THE MAGIC MACHINE: A HANDBOOK OF COMPUTER SORCERY by A.K. DEWDNEY

1990. W.H. Freeman. paperback ISBN 07167 2144-9 £11.95

A mathematician, finding a lecture boring, began to draw a spiral of numbers:

5 4 3 6 1 2 7 8 9 10 After a while he began to circle the prime numbers and found, to his surprise, that they lay on a series of straight lines. To test the result fully he had to write a computer program.

Such are the trivia which, in the hands of a mathematician, can uncover some of the mysteries of the world of numbers.

A.K. Dewdney, a computer scientist from Ontario, has drawn his material from mathematical recreations in "Scientific American". Fractals, Julia sets, chaos, curves, labyrinths, war games, logic, Alan Turing and cryptography - these are some of the topics which can be mined for the benefit of the computer hobbyist.

In one chapter he explains the principle of viruses and proposes a Centre for Virus Control.

The programs are suitable for any computer, not only Apples, and are given, not as basic listings, but as "algorithms" which the reader must convert to his own version of basic or other language. This might be difficult for the inexperienced computer user, although the projects are graded from easy (Worms that crawl on the screen), through Medium (demons of cyclic space) to hard (Core wars). A Useful list of suppliers is given and there is a bibliography.

For the reader willing to penetrate the algorithms and the sometimes flowery language this book will provide hours of interest at the keyboard. At £11.95 it is, by today's standards, cheap. There is a hardback edition at £18.95.

Review by A.J. ROBINSON

The Apple IIGS: What the Mac LC Should Have Been?

Roger Wagner gives his views on the Macintosh LC versus the IIgs

A review of the Mac LC in the December, 1990 issue of inCider magazine was subtitled "What the Apple IIGS Should Have Been?" The underlying idea was reasonable: If the Mac LC had been introduced in 1986, rather than the IIGS, people would most likely have been fairly happy with this transition machine to the Mac. However, history does not accommodate "what ifs", and at this point, one can legitimately ask, "Is the Apple IIGS what the Mac LC should have been?"

The unexpected factor today is the world of multimedia, and that the Apple IIGS is arguably the ideal multimedia (or hypermedia) machine. Regardless of what term you use, this environment will be more significant in the 90's than desktop publishing was in the 80's, particularly in the classroom.

The ideal multimedia machine should have good color graphics, excellent sound, and the ability to connect to laserdiscs, CD-ROM, and VCRs. It should be easy and intuitive to use, and as affordable as possible. You should be able to present your work, and easily record and transport it to share with others. The Apple IIGS has all this and more.

Let's suppose a student creates a multimedia report, and then presents it to the class. With the Apple IIGS, a standard classroom monitor or TV can be used with no special hardware. Although a TV isn't great for displaying 80-column text screens, multimedia presentations with graphics, larger text, and video sequences from a laserdisc will look quite nice. On a Mac or PC, a projection system that can handle true color is likely to cost $2000-$3000, or more.

Laserdiscs, combined with a video overlay card, add a very attractive component, and allow anyone to create very exciting results. On the Apple IIGS, a school can buy a Video Overlay Card for about $400. On the Mac LC (if a card were available), using the slot for a video card would preclude using the IIe card. Cards similar to the Video Overlay Card on other Mac models cost around $2500. (By the way, services are now available that will convert your own videotapes to a laserdisc for $200-$300!)

On its way to that TV or monitor, the Apple IIGS video can be routed through any common VCR, recording both the audio and video portions of the presentation, so Mom and Dad can see what they did at school, and keep a permanent record of the moment. Presenters can go to conferences with just a video tape, without lugging tons of computer hardware. Macs and PCs require a special adapter (an "NTSC Converter"), and these can be an expensive addition.

You heard it here first: The VCR will be the printer of the 90's. How else to record sound, animation, graphics, video and more, and in a form that anyone can view (virtually all homes and schools now have VCRs). Once you're aware of what the GS can do, hearing that another computer can't be recorded with a VCR is like hearing it can't be attached to a printer. An article in the October 15, 1990 issue of BusinessWeek discusses Apple's generation of computers AFTER the Mac: "At least two years off, Jaguar will include extensive video technology and the ability to connect to TVs and VCRs, Apple employees say." How great for Apple IIGS owners to know that they don't have to wait for the successor to the Mac. They can have all this now!

Schools that purchase Mac LC's, hoping for a color multimedia machine, will be surprised to discover that HyperCard on the Mac is only black & white. A limited ability to display single color graphics is available, but to just draw a line or two in color, you'll need a GS with HyperCard or HyperStudio. Want to use the microphone on the LC? You'll have to leave HyperCard, run a separate program, and then go through some additional steps to incorporate the sound. On a GS with HyperStudio, adding sound is easy and perfectly integrated into the overall environment.

Last of all is the working environment itself. Stackbuilding on the GS is significantly easier. Thousands of schools are using the Apple IIGS for multimedia right now, and projects created entirely by 1st graders are by no means unusual. Home users of the Apple IIGS find it perfect for not only the kids, but fun for personal-interest uses from family trees to hobby-related projects. Through user groups, mail-order catalogs, and online services like America Online, CompuServe and GEnie, there are already almost 200 megabytes of existing hypermedia applications (stacks) of every imaginable kind - all for the Apple IIGS.

What does the future hold for the Apple IIGS? The Apple IIGS is not an outdated technology. The Apple IIGS has features that are not currently available in any machine, and offers a solution that couldn't be more relevant to the next revolution in computing. I've personally travelled extensively across the U.S. in the last year, and everywhere I've seen a tremendous amount of interest and enthusiasm for what the Apple IIGS offers. This interest is the result of recognizing a practical and immediate tool. If you haven't yet seen what multimedia and the Apple IIGS are all about, there couldn't be a better time than now to find out what the future holds, and how you can make that future a present reality. If you already have an Apple IIGS, then you'll be happy to know you own the best machine possible to enter the 90's!

Roger Wagner

❑ From a letter to inCider/A+ magazine, March, 1991. Permission is hereby given by the author to anyone wishing to reprint this letter. Please include this permission statement with any reprints.

Font Mavin D.I.Y.

Or How To Fill Your Fonts Directory To Your Hearts Content ...

by Fred Greatorex

Have you ever thought 'gee that's a nice font, but...' well I suppose a lot of us have. We like a font but wish that it looked more like our handwriting or perhaps a style of calligraphy. Or we have a font that we like, but it only comes in, say, 10/20 points and 12/24 points, and you really need 18 & 36 points.

Well, life isn't that hopeless, just download Fontasm from TABBS or send away for one of the GS public domain disks that has Fontasm on it. That will solve part of your problem. The other part of the problem is how to keep to the style of font so that when you edit your 18/36 point font it will look like your 10/20 and 12/24 point fonts. I think that the easiest way to do this is to type up A-Z and special characters in a painting program like DeluxePaint and double the size of the letters so that you can see how the individual pixels lie. I wont say that this is quick and easy, because it isn't. There is a lot of time involved in editing a font, anywhere from 30 minutes to 30 hours (but then the font that I took 30 hours to edit was Chadwell, and I got carried away with font sizes and special characters.). It is also very important to not judge your first effort too critically, because like all things it takes practice.

Get yourself Fontasm

After downloading Fontasm or a similar font editor (Fontasm is the Best public domain font editor that I have found) READ THE DOCUMENTATION. There may be little quirks about the software that you do not want to discover when you have just finished editing a font and then you find out that it wont save. Before I start out to edit a font I do the following two things:

1. Have a printout or diagram of what I want the font to look like.
2. Have a 'spare' directory to save the font to while I am editing it, instead of putting it in the :system:fonts directory.

First of all if you are creating a new type style you have to figure out the font height in pixels, and the descent or how far the things like 'g' and 'y' go below the baseline. The baseline is where the bottom of most letters rest. The way to figure this out is just simple multiplication and rounding. If a 10 point font is 10 pixels high with a 2 point descent multiply 10 by 1.8 for a 18 point font, 1.2 for 12 point, 1.4 for 14 point and 2.4 for 24 point etc. to give you the font height and 2 by 1.8 for font descent. Simple eh? For .5 and under 1 round down to the nearest pixel, .6 and up round up. Using the above examples,

10*1.8= 18 points [total font height]
2*1.8=3.6 points (round up to 4) [descent]
18-4=14 points from baseline to top of font with a 4 point descent.

The only hang up I can think of is if you don't have a 10 point font to figure from. I would adjust the existing sizes, and rename say a 9 or 12 point font to 10 points. For those of you who are numerically inclined, you can figure out an appropriate formula.

After you have done your math stuff start up Fontasm, and double click on a character (fig 1) to edit it.

Fontasm will respond with the editing screen. The character will display with a blank pixel before and after the character for even spacing (fig 2). Do not leave blank pixels while editing.

Spacing will be taken care of later.

Getting down to the Pixels

To erase the pixels on screen simply click on a black pixel, to erase a large block start at a corner with a black pixel, hold down the option key and drag diagonally over the area to be erased. The option key can also be used to fill in large areas, or draw straight lines in the same manner.

There is also a 'Grid' option which draws little blue lines along the pixel borders. This is a really neat feature, and is really helpful if you can find fine graph paper to draw your font on, and then just copy it into the machine. It will also help you in judging height and width.

Figs 2-5 are the letter 'b' in various stages of editing. Note that you can go past the left and right borders (and

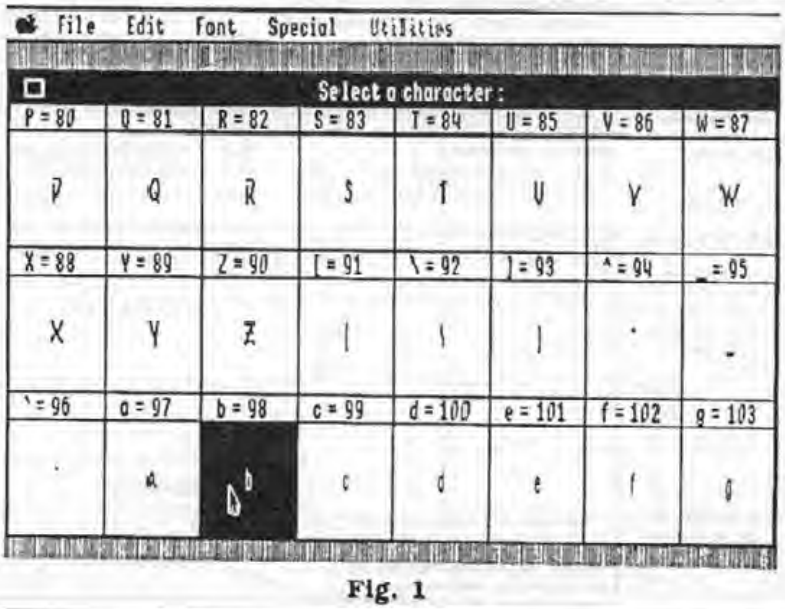


Fig. 1

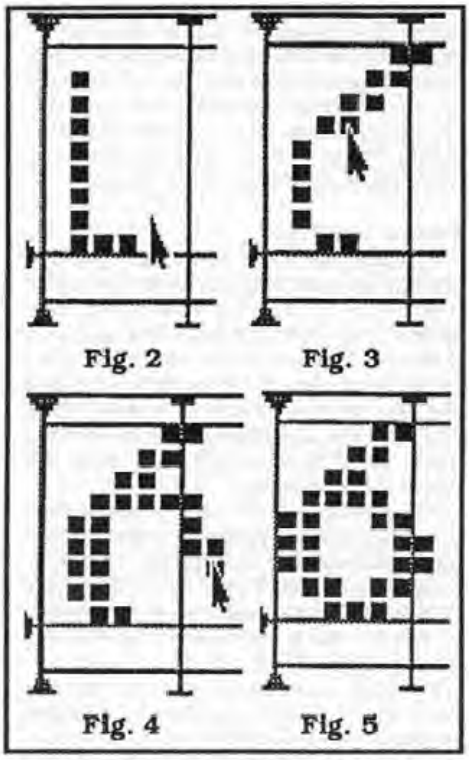


Fig. 2 Fig. 3

Fig. 4 Fig. 5

below the baseline) just remember to change the character width (fig 6). This dialog box will ask you the characters origin, which is best left a zero, and the characters end, which is the width in pixels. There are no set guidelines for with, just what looks best to you.

Tricks and Tips

1. There are a lot of letters that are similar to each other in most fonts like o, b, c, d, e, g, p and q. I like to edit the 'o' first, copy it to the 'b' and 'd' and add the 'back', copy to the 'c' and erase part of the front copy the 'c' to the 'e' and add the bar in the middle of the 'e', then copy 'b' to 'p' and change the ascending back to a descending tail, and the same for 'd' and 'q'.

In renaming fonts pick a name that you like, and or describes the font. A good example of this is the 'Artdeco' font. It looks 'Art Deco' A bad example of this is the 'Camelot' font. It doesn't look very 'King Arthurish' nor is it a 'Calligraphic' font

I highly encourage you to 'double font' and smooth out the double size font for 'Best' quality printing. When you edit a double size font all you have to do is 'smooth the rough edges'. This takes a fraction of the time that it takes to edit a font initially and it will pay off in a smooth looking printout.

There are a couple of articles that I have read about fonts that I highly recommend. The first one was in Open-Apple/A2 Central on fonts. It was very informative. The only problem was that I couldn't find it to quote the volume and issue number for this article. The second one is not just on fonts but is entertaining reading just the same it is Metafont, Metamathematics, and Metaphysics by Douglas R. Hofstadter. It was originally printed in Visible Language and later reprinted in his book Metamagical Themas [Basic Books, Inc. 1985. ISBN 0-465-04540-5]. This is a great book, but should only be read in small doses.

Fred Greatorex

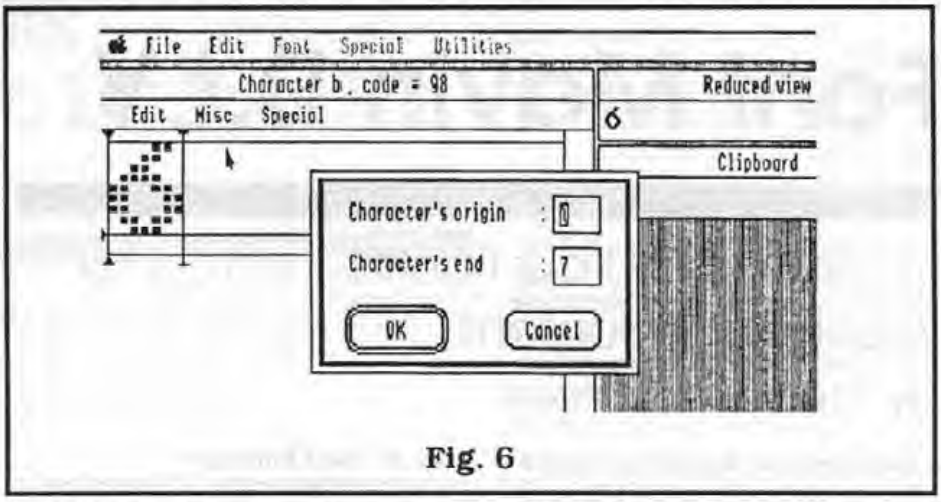


Fig. 6

Footnotes:

1. I refer to point sizes 10/20 in this manner, because when you print in best quality GSOS looks for a double point size to print at fifty percent reduction. This gives a very smooth look to any font. It just seems to take twice as long to print.

2. Herman Zapf who created the typeface Optima took seven years to design this it. But he didn't have an Apple.

3. To create a double size font, like 24 point I suggest editing a 12 point font and then using the Fontasm's 'double font' option. After doubling, edit out the pixels that make it look too blocky.

HARD-TO-FIND, UNIQUE PRODUCTS FOR APPLE II ENTHUSIASTS

from the most reputable fax/phone/mail order company serving the Apple II community

IIgs Batteries

When your IIgs loses track of time and can't remember your control panel settings, it means your battery is dead. Since the IIgs battery is soldered to the motherboard, some dealers actually want you to pay for a motherboard exchange to fix the problem. Instead, just clip off your old battery and slide on one of these new replacements. No soldering necessary. Kit includes fully compatible lithium battery and complete installation instructions.

NO-001 Slide-On Battery for IIgs $14.95

Cheap 3.5 drives

For months you've been asking us to carry inexpensive 3.5 drives. For months what you've wanted simply wasn't available in a drive we could support. But now AMR has produced an 800K 3.5 drive that's just like an Apple 3.5 at a fraction of Apple's $429 price. Plugs into IIgs or IIc-Plus disk daisychain. Also works on a IIe with AMR's disk controller or on your Macintosh.

AM-001 AMR 3.5 drive $199.00
AM-002 AMR 3.5 controller for IIe $59.00

Prosel 8 and 16

Prosel is a comprehensive disk utility package. Prosel 8 works in the ProDOS 8 environment, Prosel 16 (includes Prosel 8) in the GS/OS environment of the Apple IIgs. Includes file and disk copy and backup utilities, program selector, scheduler, and much more.

GB-001 *Prosel 8* $40.00
GB-002 *Prosel 16* $60.00

Stack Support

Stacks have arrived in the Apple II kingdom and we're ready to offer charter subscriptions to the first Apple II publication about hypermedia. It's published 6 times a year as a set of stacks and distributed on 3.5 disks. ***Stack-Central*** includes the latest information on Apple II hypermedia developments, authoring tips, clip art and sounds, and samples of the best public domain and shareware stacks we can find. Requires *HyperStudio*.

SC-1 ***Stack-Central***, six 3.5 disks $42.00

HyperStudio

HyperStudio is the first program to take full advantage of the sound and graphics of the Apple IIgs. It's HyperCard-like, for those of you familiar with the Macintosh, but cards can use the full-color capabilities of the IIgs and no scripting language is required. You can create stacks and add sounds by point and click.

RW-005 ***HyperStudio*** $129.00
SCWH-1 Special HyperStudio/Stack-Central $139.00

Network Connectors

These are the connectors you need to create an AppleTalk network. Not only do they cost less than Apple's connectors, these work with inexpensive telephone wire (not supplied) rather than Apple's expensive, special cables. You need one connector for each computer and printer on the network.

OE-001 ***ModuNet 8-pin*** $34.95
OE-002 ***ModuNet 9-pin*** $34.95

News and solutions

Are you tired of Apple Computer's incessant message that only the Macintosh is a serious computer? Thousands of people like you subscribe to our monthly Apple II newsletter, ***A2-Central***. It's a small, personalized publication concerned only with the exchange of meaningful information about the Apple II.

Just 8 pages thin, each issue is professionally typeset and packed tight with answers to the questions Apple II users around the world are asking. It's punched for a three-ring binder, indexed each February, and is considered by many to be the single most important information resource in the Apple II world.

A 3.5 disk subscription is also available, which includes both a paper newsletter and the full text of that issue in a disk file for full-text searches. The remainder of the disk is filled with programs from our subscribers, from our library on GEnie, tech notes, system disk updates, and other hot stuff.

A2-N1 ***A2-Central***, paper, 1 yr $28.00
A2-D1 ***A2-Central***, 3.5 disk, 1 yr $84.00

Apple II books

We carry in stock virtually every book in print that's about the Apple II. From Addison-Wesley's Apple Technical Library to Sams Computerfacts manuals to *AppleWorks Tips and Techniques*, we have them all. Write for our free catalog or call and ask about the book you're interested in. We also have in stock the accompanying disks for many books.

Full Set Specials

You can get every issue of ***A2-Central*** we've ever published--five years worth of Apple II tips, tricks, and solutions to your problems--for just $39. Paper back issues are bound and indexed. Back issues on disk are for full-text searches using software such as *FastData Pro* and include six 3.5 disks--well over 4 megabytes of information.

FS-N Indexed back issues, paper $39.00
FS-D Back issue text on 3.5 disks $39.00
FD-001 ***FastData Pro***, for searches $49.00

No Risk Guaranteed If you aren't completely satisfied with your purchase, return the merchandise in its original package and we will refund your money in full. **We back our products!** Our 45-day unconditional guarantee means you take no risk on any product you buy from us.

A2-Central PO Box 11250, Overland Park, KS 66207 voice: 913-469-6502 U.S.A. fax: 913-469-6507

item #	qty	price

☐ Send me your full catalog FREE!

name _____

adr _____

☐ Visa ☐ MasterCard

Prices are in U.S. dollars. All prices include shipping; airmail for A2-Central and Stack-Central, surface shipping otherwise. Request airmail and we'll add the postage to what we charge you.

card number ☐☐☐☐-☐☐☐☐-☐☐☐☐-☐☐☐☐ expiration date ☐☐-☐☐

M291

ProSel 16 - 8.67

Dave Ward gives us an update on Glen Bredon's one man compendium of disk utilities

Since I last reviewed ProSel 16 version 8.58 in the February 1991 issue of Apple 2000 magazine the commercial version consisting of a manual and diskette has been launched by Charlie's Appleseeds of San Diego California. A copy of the manual and disk (ProSel 16 v8.65) has been kindly sent to us by Charlie's Appleseeds so that we can complete the review. Since receiving the package ProSel 16 version 8.67 has appeared and will be used for the purposes of this review.

A listing of the files on the /ProSel diskette shows some new files have been added since version 8.58. The disk is now so full that there is now no longer any room left for the text file version of the manual!

Figure 1 shows the main menu for ProSel 16 version 8.67 which if compared with the main menu for ProSel 16 version 8.58 in the February magazine differs only in the Text Editor.

What has changed?

The main differences between ProSel 16 versions 8.58 and 8.67 are listed below:

1) The bound manual.
2) The Text Editor.
3) Backup/Restore function offers better support for other 3.5" drives.
4) Mix 'n Match.
5) Better support for ProDOS 8 programs for users of the Appointment Calendar.
6) Virus detection.

The Manual:

'ProSel 16 is a 'Hard disk management system'.' The new manual proudly states the above on its front cover. The manual is a 147 page adhesive bound book which is basically a compilation of the old test-file manual, the Number Cruncher text-file manual and other additions. The manual covers very adequately all aspects of the usage of ProSel 16. All the subjects are covered in great detail yet are quite easy to read and understand. An appendix contains summaries and quick references but also takes two pages describing ProDOS error codes and GS/OS system codes; very useful. Reading the manual is definitely required because quite a few of the ProSel 16 commands are not intuitive but none-the-less easy to use and memorise.

The Text Editor:

This is the last large module that was added to ProSel 16. It appears to be an upgraded version of the Merlin 16 plus editor and is scrollable in four directions but has a maximum of 255 characters horizontally. It differs from most modern editors in that it does not support 'word wrap' but each line is terminated with a carriage return. This editor is very useful for creating script files. The editor is very convenient to use as it is virtually a key press away and appears instantly. This editor has most of the features you would expect in an editor including cut, copy and paste; global and local find and replace etc. etc. There are also unusual features such as a 4000 step undo buffer in case you made a mistake 10 minutes ago! This is a very good editor which I use generally for writing letters and reviews. It is stated in the manual 'This manual was written and printed, photo-ready, with this text editor.' !!

It is my opinion that many users will feel that this text editor is missing one important feature: WORD WRAP. ProSel was written for Glen's personal use and the text editor is no exception: Glen doesn't have the time for word wrap. The main purpose of this editor is, of course, to write and edit scripts which definitely don't need word wrap and require a carriage return at each line end. Still users would benefit by the option to word wrap; text editor is right on hand and could almost cut out the need for a word processor.

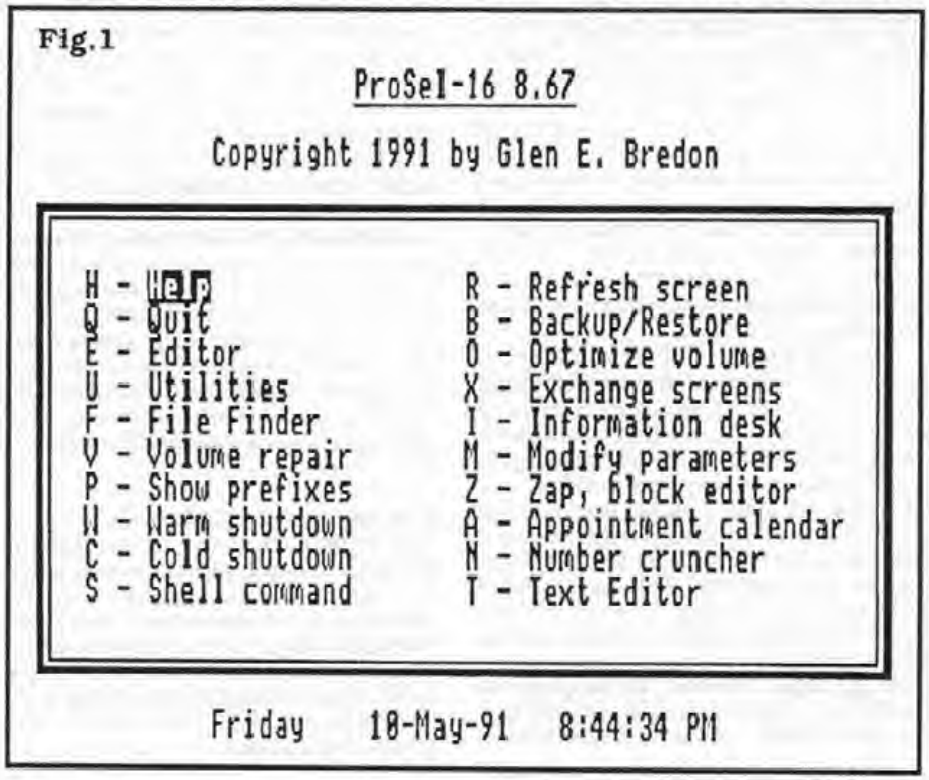
I am not sure if this is a bug but using back arrow with control, the usual way to speed up the cursor deletes the text!

There is one obscure bug, however, which involves the delete key. If you are on any line and press the delete key the character in front of the cursor is deleted. The exception is if you place the cursor at the top left-hand corner of the screen and are also not on line 1. If you then press Delete key the program bombs into the monitor.

Backup/Restore:

Backup/Restore function now works perfectly with the AMR 800K drives and also with the Applied Engineering 800K and 1600K drives. Although Backup/Restore is said to be compatible from one version to another after the big change in version 8.2 I have occasionally found problems. For instance a backup produced on an Apple 3.5" drive using version 8.65 would not restore on any drive under version 8.67. Whenever I update the version of ProSel on my Apple IIgs I update the three files listed below and

Fig.1



also make new backups of those areas of my hard disk that I normally do after their use. It is also a good idea to save older versions of ProSel 16 just in case there is a problem; you may then restore from a backup made using an earlier version.

START
PS.16.TO.8
APPOINT.CDA

Mix 'n Match:
This is a separate utility which allows users of ProSel 16 who only have small disk drives to make custom versions of ProSel 16 containing only those modules that they regularly use. This utility offers no help to hard disk users, though.

Appointment Calendar:
ProDOS 8 was not designed in the same way as GS/OS to deal with interrupts and certain ProDOS 8 programs do not like this environment and balk at the Appointment Calendar's interrupts. The main problem is with communication programs but some other ProDOS 8 programs seem to give problems because they were not designed to deal correctly with interrupts. To counter these problems you can specify that the Appointment Calendar be switched out whilst you use your ProDOS 8 program by placing a - in the PREFIX specification. From ProSel 16 version 8.65 Glen has attempted to improve the situation and placing – in the PREFIX specification will turn off the audible Appointment Calendar warning which will make it more compatible with many ProDOS 8 programs.

Virus detection:
ProSel 16 acts as a gatekeeper against at least four of the known Apple IIgs virus programs. For obvious reasons Glen Bredon does not give much information regarding this matter. However, if you look at Figure 1, the listing of the ProSel 16 diskette you will see a folder RX which contains information about Glen's Virus medicine program. In that folder there is a file Defanged.virus. Whilst this is not a real virus ProSel 16 refuses to load it! Don't expect ProSel 16 to detect new virus infections. Glen rightly gives little away about how his virus detection works so it is just possible that poorly written new virus programs will be detected.

Other areas have also been upgraded during the last few revisions including the volume optimiser which is a very fast robust program. It rarely takes more that 60 minutes to optimise my 32 megabyte hard disk.

Conclusion:
With the introduction of the bound manual ProSel 16 has at last reached maturity and it is unlikely that any new modules or largescale changes will be made. However, there are likely to be many more revisions, not because of bugs, but because Glen Bredon is a perfectionist. ProSel 16 is very good value for money as you could pay as much for any pair of modules from other sources.
Dave Ward

ProSel-16 is written by:
Dr Glen E Bredon 521 State Road
Princeton NJ 08540

ProSel 16 may be purchased from:
ClockTower PO Box 1417
London N8 9PP
Price:
3.5" disk with manual £60.00 at most.

A2 Central PO Box 11250
Overland Park Kansas 66207 USA
Price:
$85.00 with free surface shipping.
Shipping by airmail may cost more.

ProSel 16 may be upgraded as follows: By sending your diskette and $10.00 or $25.00 if you want the printed manual. UK purchasers should add $5.00 for shipping.

Endnote: ProSel has reached version 8.69. Users of TABBS are able to download recent updates to ProSel. These will only update genuine original copies of the master diskette.

APC Uninterruptible Power Supply

a review by Dave Ward

Ever since I've had a computer I have always dreaded a power cut whilst the computer is writing to the disk, well it hasn't happened, in about 11 years, yet!! I tend to keep a lot of backups so I don't suppose that it will be a real problem when it actually does occur. It is the commercial users who treat the computers and software as tools and generate large quantities of data. A wreaked hard disk would likely cause them large problems. These uninterruptible power supplies are a trifle expensive so your data also has to be rather valuable.

The unit kindly loaned to me by Alan Finn of Clocktower was a European 230 volt version. Then 22 page manual only mentions the product for use with an Apple Macintosh II; the Apple IIgs is not mentioned anywhere. After unpacking the unit I found that it fitted perfectly under the Apple IIgs box just as if it had been made for it! The height of the unit is about 7cm so it doesn't add too much height. The front of the UPS is chamfered with 5 lights. At the back are: a on/off switch, a test button, a circuit breaker, bank of 4 DIP switches, a 230v mains input and four output sockets. All mains connectors use male/female coffee-pot connectors. Of the four outlets the left most viewing from the back is a master switch. I plugged my Apple IIgs into this socket. Peripherals are supposed to be plugged into the slave sockets. After plugging in and switching on every thing worked correctly; none of the slave sockets being used. I then left the unit for a day to charge up.

Next day I just used the machine as normal - nothing seemed to be different. The next thing to do was to try peripherals in the slave sockets, by the way the manual tells one not to plug in LASER printers as they use too much power. When I switched on nothing happened, either there was a problem here or the Apple IIgs did not draw enough power but the manual did refer to this power load problem. Normally the unit detects the power drain when switched on and then powers up the slaves - otherwise nothing at all!! I flipped one of the DIP switches to override this feature and everything worked ok.

Now to test the device:
Switching off at the mains has not effect upon the Apple IIgs, immediately but the UPS unit certainly lets you know every 30 seconds or so!! I also managed to get a fuse to blow which again had no effect. I might add that while these unthinkable things were happening the computer was optimising a disk!!

The idea of this Uninterruptible Power Supply is to allow one to complete a task such as updating a disk file without damage to the disk and file. Under the circumstances less than a minute will be enough. I left the UPS without power and found that after 43 minutes a very rapid beep sequence started indicating that the power was almost drained. I could attach a lot more peripherals to this unit and still get a good result.

After a week or so I returned the unit but on arrival it was completely dead due to the transformer falling off because the unit had been upside down during part of its transit! Alan Finn tells me that the correct name for this device is a dropping transformer. Hmmm.... American Power Conversion are now aware of this.

Conclusion:
Simple: if your data is worth more than £100.00 plus VAT then you should consider buying this product it will let you sleep at night.

American Power Conversion Corporation 132 Fairgrounds Road P.O. Box 278 West Kingston RI 02892

Available from:
ClockTower PO Box 1417
London N8 9PP
Price: Less than £400.00 plus VAT

There is a less powerful Macintosh SE version at less than £300.00 plus VAT.

Medley Version 2.0

Peter Stark looks at the latest version of this desktop publishing program

Introduction

Medley is a very flexible desktop publishing program for the Apple IIGS. It is excellent for word processing, artwork, and page layout, and has many useful facilities - some of them quite unusual.

In the August 1989 issue of Apple 2000, I described an earlier version (v. 1.00) of Medley. This present review is about a later version (v.2.0) and how it compares with the previous one. Some of the main features of Medley are also summarised again for the benefit of readers who do not have the earlier review.

What is supplied, and what you need

Medley is supplied on four non-protected 3.5" disks (Startup, Program, Dictionary, and Clip Art). Also provided are: a 254-page manual; a 30-page tutorial; a quick reference card; and a 16-page supplement which describes the new features of Version 2.0. All of these documents are well produced, and are written clearly and informatively; they come in a strong ring binder with a slip case.

To use Medley Version 2.0, you need a IIGS with at least 1.125 Megabytes of memory (the earlier version needed 1.25 Meg) and at least one 3.5" disk drive. A second 3.5" drive or a hard drive would be very useful.

Differences between Versions 2.0 and 1.00 of Medley

In my earlier review, I praised many of Medley's features, but I commented on its relative slowness. I am glad to be able to say that Version 2.0 is a good step forward as regards both speed and performance. It is compatible with GS/OS and IIGS System Software 5.0,

and it runs decidedly more rapidly than the previous version. Many operations, such as scrolling text or opening and closing windows, are noticeably faster and smoother. The type-ahead speed and start up times are also better. Another advantage is that printing in the 'Condensed' mode has been improved a lot. In this mode, text is compressed vertically when printed, but its width is unchanged; the result looks more attractive. (The art areas are printed out with the correct sizes and proportions). Clear details are given in the Version 2.0 Supplement to the Medley Manual. With the earlier version of Medley, pagination was sometimes a problem when printing in the Condensed mode; this difficulty seems to have been resolved.

As before, the fonts which are accessible in use are the ones which are located on the Medley Startup disk. Since System Software 5.0 takes up more room on disk, the Medley 2.0 Startup disk contains fewer fonts than the earlier version did. However, additional fonts are provided in a folder on the Program disk, so that you can modify your set-up by swapping fonts between these two disks if you wish. Incidentally: I found that an alternative is to put a 'Load a Font' New DeskAccessory (which is not a Medley product) onto the Medley Startup disk. With the aid of this NDA, additional fonts from other disks can be loaded and used while working with Medley. Of course, if you have a hard disk, you can simply add whatever fonts you wish to the 'Fonts' folder.

Word Processing

Text can be typed directly into Medley, or else you can import AppleWorks word processor files (except those from AppleWorks Version 3). Text (ASCII) files from AppleWorks v.3 or from other word processing programs can also be imported, but some of their original formatting is

likely to be lost. Another worthwhile feature is that it is possible to have up to ten different documents on the Medley desktop at any one time, and it is easy to switch from one to another. The maximum document length is 32 pages (except when you intend to print in Condensed mode - in which case the limit is 18-24 pages, depending on the size of your paper). Wherever you wish, you can change fonts, type sizes, and type styles. A host of other features are available: super- and subscripts; cut, copy, and paste; find; replace; manual or auto hyphenation; various kinds of tab stop, tab leader, text justification, and word wrapping (horizontal or vertical); horizontal and vertical on-screen rulers; page numbering in various styles and positions; headers and footers; and many more. An unusual and helpful feature is the 'Undo' command, which lets you cancel up to ten of the last changes made to the document. There is also a 'Redo' facility. The Dictionary disk allows the use of Medley's spell checker and thesaurus, both of which work well. With the 'Show This Page' command, you can see (but not alter) small representations of the pages of the document that you are working on.

Art Areas and Page Parts

With Medley, you can very easily create 'art areas' in your documents. A powerful and valuable feature is that these areas can be of almost any shape - including polygons that you design yourself. You can move art areas, change their size and proportions, and even convert them from one type of shape into another if you wish. Graphics can be imported into these areas (e.g. from the Medley Clip Art disk), and there is a good selection of paint tools as well. Text wraps round the art areas, whatever their shapes. By inserting tall thin rectangular (empty) art areas into your text, you can divide it into two or more columns, for instance.

Another really useful point is that any 'art area' can be changed so that it will hold text instead of artwork. The resulting areas (which are then called 'Page Parts') now function as miniature pages: text wraps inside them, and can flow from one to another.

Overall comments

Medley is a powerful program with a lot of useful features, yet is still enjoyably easy to use. Many help screens are available, but I soon found that I hardly needed to refer to them any more. The quality of the printed output can be very pleasing. Compared with the earlier version of Medley that I tested some time ago, Version 2.0 is a real improvement, particularly as regards both speed and its Condensed printing mode. It ran well on an unaccelerated IIGS, and was even more enjoyable to use on a IIGS fitted with an accelerator (I used a Zip GSX in some of my trials). I was pleased by this latest version of Medley, and can certainly recommend it.

Peter Stark

info

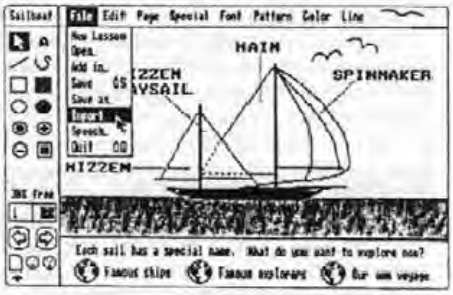
Product : Medley Version 2.0
Publisher : Milliken Publishing
Available from :
MGA SoftCat
41 Cinque Port Street
Rye
East Sussex TN31 7AD
0797-226601
Price : £129 WYSIWYP

Value :
Performance :
Documentation :

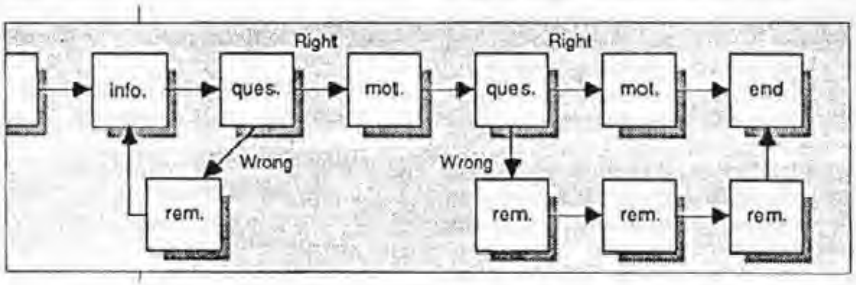
Tutor-Tech

Terry Cymbalisty takes us on a voyage of discovery ....

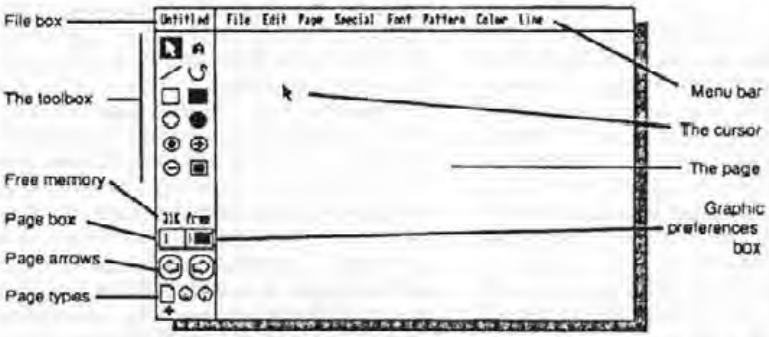
Tutor-Tech is an "Authoring System" available for 128k Enhanced Apple //es and above. One also needs at least one 5 1/4" disk drive, an 80 column card and some form of pointing device being either a joystick or preferably a mouse. (The joystick response tends to be a bit "jerky".) On the surface, this product looks exactly like HyperCard, which runs on expensive Macintoshes. Tutor-Tech provides a menu-driven system for creating frames of text and graphics .



You can also put buttons or text-response fields on the frames. As with HyperCard, buttons have a destination frame that is loaded when you click the button. The text-response field, on the other hand, leads to one of two frames depending on whether the response that has been typed in is what the author said it should be, ie correct or wrong.



Buttons can also increase or decrease student's scores. Hence the teacher is able to create stacks which contain questions to which the student has to give either a correct or incorrect response. The structure of the stack hence is determined by the responses of the student. The stack is interactive!



HyperCard comes with a full-blown programming language, HyperTalk. As such, very sophisticated applications can be created. Tutor-Tech on the other hand is limited to the application type that is simplest to create in HyperCard, ie collections of frames that you can link together with buttons. Tutor-Tech stack sizes are limited by available RAM, although a complete lesson (or stack) can be 250 frames long. HyperCard stacks are disk resident and as such are only limited by the size of mass storage available.

The Tutor-Tech package comes with a two hundred page spiral-bound manual. I thought that it was well presented and set out in a clear manner. The manual begins with a brief overview of the product, highlighting the main features. The manual goes on to include a tutorial section, where the teacher is encouraged to create a stack as he works through the tutorial. Most of the key features are used and the teacher (ie me) quickly learns how to use the product. I feel that the best way to learn a new product is to create something with it and one is quickly doing this. The product is very intuitive to use, in my opinion, and I was soon adding my own modifications to the tutorial examples. Further sections in the manual include a reference section for both the teacher and the student and a reference for the optional Grader disk. There is also an appendix which mentions Tutor-Tech's compatibility with external devices such as videodisc players, Apple's Video Overlay Card, networks, speech synthesisers and the use of RAM cards.

As mentioned previously, a Grader disk is available as an option. The software on this disk allows the teacher to create grades for his or her students. Firstly, the teacher creates a scores file on the student disk. When the student uses the stack, he identifies himself, then the student's responses to the questions within the stack are recorded. Then the teacher runs the programs on the Grader disk to produce grades for each student. The pace of each student through the stack is monitored, and the teacher is able to monitor this. Various graphs showing averages can be produced.

Tutor-Tech comes on three 5 1/4" floppy disks. A teacher's disk, a student's disk and an examples disk. The examples include various samples of clip-art and the Red-Tape game. This is a sophisticated adventure type game, and is an example of what may be achieved quite easily with Tutor-Tech. Other stacks on the disk include lessons in astronomy and geometry. "Stack Exchange" is a newsletter which is available from the manufacturers of Tutor-Tech and contains details of stacks from other teachers and developers. Also tips on creating animation and music in stacks are included in the sample issue included in the box in which Tutor- Tech came. Tips on how to market one's created stacks are mentioned.

In summary I would say that Tutor-Tech is a super little program. It proves that the Apple // computer is not dead and capable of many wonderful things. I would guess that it's main application would be in the educational field. But since this country's schools use the more "sophisticated" BBC computers then its applications here are limited. But having said all this, it would be an ideal present for one's children. There would be no reason why the children should not create their own stacks. In fact it would form the basis for an excellent multi-media database.

Terry Cymbalisty

Rastan GS

John Kishimoto fights the warrior Lord Rastan ....

Introduction

Described as an adventure into a mythical world of danger, Rastan GS is an excellent implementation of the action/arcade genre. You are Rastan, a warrior lord, engaged in an adventure to free the land of Lograth from the dragon's evil rule.

The Game

As in many games, it is often very difficult to convey the atmosphere inherent in this type of software.

The graphics and animation implemented in this game are equal to or better than the more popular games orientated computers. It is also reassuring to note that an accelerator isn't necessary for smooth animation to take place. The characters and background are very detailed and takes full advantage of the capability of the GS. As a beginner in the arcade type of games, I have not made significant headway into the game, so cannot define its limits. The play area in this horizontally scrolling 'hack & slay' game seems to consist of 3 sections per round. Each section is an extension of the previous, ranging from a desolate scenery, to a castle and its winding corridors. Life threatening danger exists everywhere, the most devious being a moving wall pushing you inexorably towards a flaming pit. It's easy to die in this game. A bar graph shows your current status and a beating 'artery' with accompanying heart beat sound effects provides a suitable visual/auditory indication of your health. The faster the beat, the weaker you are.

The creatures ranged against you wield everything from a club to a flaming sword. To help you in your quest, various additional weapons can be collected, often located in very awkward sites. Fortunately, accuracy with a joystick isn't a prerequisite to enjoying this game.

Controls

Both joystick and keyboard can be used in Rastan. By pressing Open Apple-Control-Escape, a control panel is revealed. The panel allows calibration of the joystick, control of sound and a stereo card.

Control by joystick is simple and preferred, allowing full control of Rastan and his weapons. Jumping and climbing can be achieved with ease, including fighting while hanging from a rope.

Finally

Produced by Taito, Rastan is supplied on 2x3.5" copy protected disks. Although this will run on a 1Mb GS, 1.25Mb is recommended for complete sound effects.

An excellent arcade game, this is one which deserves a place in your games library.

Warning

I have been advised, by my dealer, that Taito will no longer support the GS. It would appear, therefore, that supplies will be limited to those that have already been produced. This will also apply to Arkanoid II and QIX GS.

John Kishimoto

SUMMER HARDWARE CLEARANCE

Laser-128 Combo £299.95*
Exceptional value! - £200 off!!! One only, brand-new, 128K //c compatible computer, complete with mono monitor. Absolutely perfect for AppleWorks or Publish-It! Normal price £499.95 with monitor. Upgradeable to 1Mb with optional RAMcard. Includes free Copy II+ v8. Includes parallel interface, two serial interfaces, 80-column card, mouse interface, 3.5" drive interface, 5.25" drive, - all of which are extras for a //e.

Apple //c Computer 2nd £299.95*
Complete system with Monitor //c & stand, TV Adaptor, and two double-sided demo disks specifically designed for the //c.

Apple //c Computer (64K) 2nd £129.95*

PlusRAM £89.95*
1Mb RAM expansion card for][+ or //e w/256K installed, (extra 256K sets just £20.00 each). Automatically recognised by AppleWorks v2/&up, and includes support disk for AppleWorks v1.3. Support software also increases the max number of database records and word processor lines in AppleWorks v1.3 to over 5000, with automatic splitting of large files to several disks. Lets you use a mouse to move around in AppleWorks.

C-800 Mouse £29.95
D-9 mouse for //c, Laser-128, older Macintoshes, and Apple //e with MouseCard //.

Apple Mouse 2nd £39.95
Genuine Apple mouses as above, also a couple of new Apple mouses to clear at £49.95

80-Column Switch £9.95
No more cable changing with this useful device for your][+ VideoTerm or similar 80-column card. Puts easy-access manual switch on the side of the computer unit.

//c TV Adaptor £19.99
Now you can plug in a colour telly for better gaming and educational computing.

//c TV Adaptor £34.95
Doesn't use a slot.

RGB Card (Taxan) £39.95
RGB colour monitor interface with ready-made cable for Kaga, Taxan, and Sord 8-pin rectangular connexion.

D-9 SwitchBox £14.95
2-Way manual switchbox which can be used to keep both paddles & joystick connected at the same time etc.

Accelerator][2nd £49.95
Speeds up the 1MHz][+ to 3.6MHz for blindingly fast software operation. At less than half the price of a ZipChip, an Accelerator][will make AppleWorks work faster than the poor old 2.8MHz IIGS!

SpeedDemon 2nd £69.95*
3.6MHz accelerator card for //e.

CCS-7710 2nd £29.95
California Computer Systems' classic CCS-7710 was the most-supported serial card before Apple's super serial. Buy with confidence for your modem or serial printer.

500XJ SpeedKing Joystick £14.99
Brilliant hand-held joystick for any Apple II - specify D-9 or 16-pin when ordering. Also switchable for IBM-PC use also.

UniDisk 5.25 £89.95*
Genuine Apple daisychainable D-19 140K 5.25" drive for any Apple II, but IIGS in particular. Exactly the same as Apple's current £229.13 drive, but buff in colour rather than platinum.

UniDisk 5.25 2nd £69.95*
As above but used.

Apple 5.25 Drive 2nd £79.95*
Apple's current drive, platinum in colour, preowned.

Apple //c Drive 2nd £59.95*
Genuine Apple //c external drive with D-19 connector. Can be used on any Apple II with appropriate card or our £14.95 19/20 adaptor. Perfect for //c, or as last drive on IIGS daisychain.

Disk][2nd £39.95
Apple's classic 140K 5.25" floppy disk drive for][+, //e, or IIGS w/20-pin card (card not included). Optional £14.95 D-19 adaptor available, or you may order a Disk][with a permanent D-19 connector fitted for just £49.95.

DuoDisk 2nd £89.95*
Apple's own twin 140K 5.25" drive - requires D-19 disk interface card/cable, available @ £39.95

Super Serial Card 2nd £39.95
Genuine Apple cards for modems & serial printers, or for direct cable transfer between computers, why not buy one now together with CrossWorks for just £119.95*.

RS-232 Surge Protector £3.99
D-25 in-line surge suppressor to help keep data intact.

MGA SoftCat AD ONE
Tel: 0797-226601 [fax:226721]
prices include VAT
*-prices include p&p
& where two prices shown, the lower price is for Apple 2000 members ONLY.
Access/Visa accepted
sensible software since '79

GS/OS 5.0.4

Dave Ward gives us the lowdown on the latest IIgs operating system

The Apple IIgs finally got its true 16 bit operating system with the introduction of GS/OS system disk 4.0 , but some of the promised features were not fully implemented. The promised GS/OS was introduced with system disk 5.00 which was soon replaced by system disk 5.02, due to the presence of bugs. ProSel-16 has a command that shows the GS/OS version number on the screen. When this command is executed from System 5.02 the following results:-

System 5.02
The current GS/OS version number is $8301.
It is a PROTOTYPE release.
The MAJOR release number is 3.
The MINOR release number is 1.

Notice that this is a prototype release. We had to wait for system disk 5.03 and the GS/OS version number, according to ProSel-16 is shown below:

System 5.03
The current GS/OS version number is $0303.
It is a FINAL release.
The MAJOR release number is 3.
The MINOR release number is 3.

Notice that the system disk versions do not reflect the GS/OS version numbers! Very confusing.

The reason for the new version was to tie up a few loose ends remove any known bugs and to enhance the printer drivers in regard to their speed. ProDOS 8 got a new version, 1.9 which is described below:

ProDOS 8 update

ProDOS 8 users will find that there is a new version of the file P8 in the System folder. On a pure ProDOS 8 diskette this file would be renamed PRODOS. The file is now at version 1.9 but Apple programmers overlooked to update it's number from 1.8! Users will, however, be delighted because Apple Computer Inc. have at last made the Quit code user-friendly. When you quit you are now presented with a similar screen to Bird's better BYE or Glen Bredon's Quit routine. Here is what a screen looks like:-

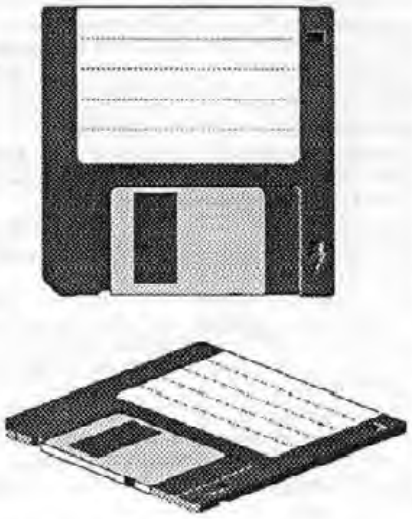
```
/DISK.NAME/

   PRODOS
   BASIC.SYSTEM

RETURN:Select|TAB:ChgVol|ESC:Back
```

The top line shows the volume name of the disk from which you quitted. Below are shown the names of any executable files including folders (subdirectories) which have a folder icon on their left. The bottom line shows the commands at your disposal. On entry the top filename is highlighted and others can be chosen by moving the up-down arrow keys.

It looks like there will be another version of ProDOS 8 before too long as the date table runs out at 1 January 1992 and on classic Apple // computers with time cards that do not count years you will see 1 January 1988! Some time during the first half of 1991 Hotline news will provide a patch to correct this problem.



System 5.04

Unfortunately during the writing of this review Apple Computer Inc. found that their precious new printer drivers had bugs if available memory in the system was low and a new version, System disk 5.04 was introduced to fix these. Ewen tells me that he found another bug in System 5.03 in relation to the event manager which caused a clock on one of his screens to vanish.

Installing System 5.04 and then checking the version with ProSel-16 reveals that it thinks that it is the same release as version 5.03!! There is probably a good reason for this as GS/OS may have not changed but printer drivers or other secondary files will have changed.

GS/OS will also show the version when your boot up. To do this press a key quickly before the super high resolution graphics screen with its thermometer appears - then the following text screen will show current version of GS/OS on the top line with the current version numbers of the GS/OS modules. The system will continue to load you then press the space bar when commanded to finish loading.

When you receive a copy of the new System 5.04 which consists of two diskettes: System.Disk and its companion the system.tools diskette you should use the Installer to install all the system files and any drivers etc. that your system requires since these may have been changed. (See note below). Remember that you must boot the System.Disk that comes with System 5.04 since GS/OS will not let you write most system files to the disk you have booted from. The reason for this is that GS/OS maintains certain files 'open' and any changes to them could lead to problems. Also certain information on the diskette is stored in a memory cache which is used for quick access instead of always reading the disk. Changing the disk may leave the memory cache 'in the air'.

Note:

There are more changes that have been made and it goes without saying that you should be using the latest version of the GS Operating System unless there are good reasons for not doing so. Updating GS/OS by just copying over a few files is rather risky since one cannot be sure that just because the dates are unchanged the file contents haven't. I always update by booting up the latest system diskette and then using the Finder to delete the whole of the system on my hard disk. I then use the installer on the SYSTEM.TOOLS disk to install the latest version.

GS/OS system 6.00 has been rumoured for quite a while. It is an Apple Computer Inc. policy to support the Apple // line so System 6.00 is almost a certainty. What new will it offer and might it have some of the excellent features of the Macintosh system 7.00; could it arrive 'ere system 7.00?

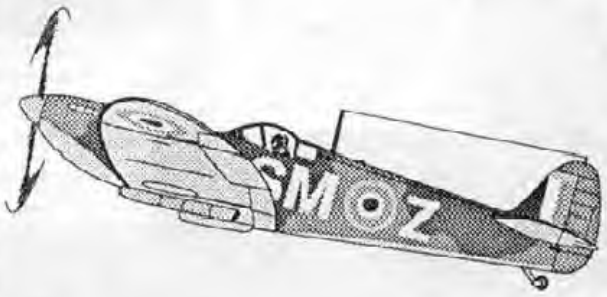
❑ The two System disks numbered 2GS037 and 2GS038 are available from the library. They may also be downloaded from TABBS.

Salvation Wings

Dave Ward launches himself into the air and gains his wings against all odds

Since the Apple IIgs was introduced in late 1986 the system has required users to connect larger and larger disk drives to utilise the system efficiently. In the early days of ProDOS-16 one 3.5" disk drive would be sufficient later with the introduction of the true '16-bit' operating systems GS/OS version 4.0 and 5.0x even two 3.5" disk drives are hardly enough to use the system efficiently and a hard disk drive is almost a prerequisite. With such large volumes the ability to choose the program one wants has become a problem in itself. The answer is the program launcher!

Apple Computer Inc. were first in with the MouseDesk a ProDOS 8 system which was later replaced with the Finder based upon the Macintosh Finder. The Finder is a first rate program but for most users requires quite a bit of pointing with the mouse and clicking to launch the program required. Finder fanatics may well disagree with the above as they can, with some hard work, make it a little easier use in this respect. With this apparent weakness of the Finder a number of third party programmers have produced program launchers for the Apple IIgs and the classic Apple / / computers, too. ProSel was one of the first and differs from most of the other Program launchers + disk management systems in that it uses text/keyboard methods familiar to classic Apple // computer users. The others use the Desktop and mouse interface familiar to Macintosh users; Wings is one of these.



Vickers Supermarine Spitfire

❑ Wings comes in three incarnations:

Wings MiniWings MicroWings

These will be described in detail below:

Wings:

Salvation Wings published by Vitesse is described in the manual as a Disk Management/Program launcher which we will be reviewing below:-

As advised in the manual which I actually read before using the product! I made a copy of the diskette which is not copy-protected. Using this copy I renamed the START program in the SYSTEM directory on my hard diskette to FINDER and then copied across the START program from the /Wings.A/System/ folder. This method works quite well but there is a version of the Installer, by Apple Computer, on the second diskette that does the same automatically, & is simpler and quicker than my method above! You must do this from another diskette since GS/OS won't allow one to mess with its important system files which it considers OPEN when GS/OS is operating.

After this I re-booted my hard disk and the following desktop screen appeared, see Screen 1.

❑ The main screen is divided into four parts:

1) The menu bar with which most Apple IIgs users are familiar.

❑ The window is divided into three columns:

2) The left most column contains the two sets of eight launching buttons on this the current page. If you click on the box just to the right of Page: a box opens to allow you to choose from all eight pages available. Note that this gives you a maximum of 128 launching buttons.

3) The centre column is a scroll box showing the files in the current folder (directory) which is displayed on top of this box. You can go to the parent folder by clicking on the folder name on top of the box or to a sibling folder by double clicking on its name in the file list in the box.

4) The right most column is a list of useful buttons. The most important are the Disk button that cycles through the disks (volumes) on-line one-at-a-time each click on this button. The button with rounded corners is the action button, in this case DELETE. Note that this is also reflected in the screen title which is Delete mode. If you look at screen 1 you will see that clicking a file in the scroll box highlights it ready for deletion. Fortunately I didn't choose Wings! Delete mode is just one of many available and can be changed by pulling down on the File entry on the menu bar.

These are listed below:

Mode	Key
Auto	OA_A
Launch	OA_L
File Info	OA_I
Rename	OA_R
Delete	OA_D
Undelete	OA_Z
View Graphics	OA_G
Play Sounds	OA_S
Text Processor	OA_E
File Utilities	OA_F
Volume Utilities	OA_U

Vitesse Salvation Products

MGA Softcat have kindly supplied Apple 2000 with three of the Salvation disk management packages. Currently there are five products in the range:

1) Salvation Wings - Program launcher and file management system.
2) Salvation Guardian - Hard disk backup system.
3) Salvation Exorciser - Virus detector.
4) Salvation Renaissance - Disk optimiser.
5) Salvation

All five packages consist of 1 or 2 800k 3.5" diskettes a manual and advertising literature about other Vitesse products. All these are supplied in a 17cm X 25cm X 4cm cardboard box in a white sleeve brightly describing the particular product.

We will be reviewing these five products over the next few issues of Apple 2000 magazine.

When Wings is entered or re-entered after finishing an application the Auto mode is active.

Whatever mode is chosen the program dims those file entries that are inconsistent with that mode. Also folders are not dimmed because they may contain files consistent with the chosen mode; when clicked open and display the files in that folder.

In this mode the program tries to determine the type of file that has been highlighted in the central column and then proceeds to execute it. For instance a PIC file will be displayed on the screen as it would if you had chosen ViewGraphics option. This works quite well but can be fooled; for instance BINary files are not always executable programs. Wings might try to launch such a file and a crash could result. There is a way to tell Wings not to launch BINary files, though.

Mode File Info:

None of the files in the scroll box will be dimmed with this option. See screen 4. Clicking on boxes on the right-hand of screen 4 will allow one to change those file attributes.

File utilities:

Invoking the File Utilities produces a typical screen; see screen 5. This is an interesting way of dealing with files in that both the source and destination folder contents are displayed as two scroll boxes. If you've used other file utility programs this might take a little time to get used to, however, I found it to be quite a pleasant way of copying files from one folder to another, etc.

Volume Utilities: See screen 6:

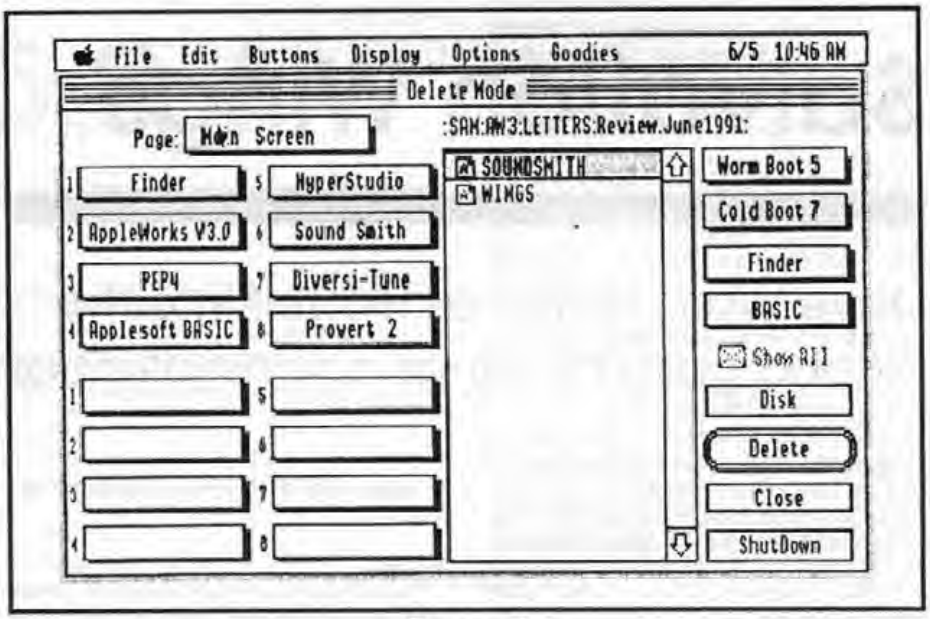
Programming Buttons:

Since this is a program launcher you'll want to add new button definitions from time to time and perhaps alter or move existing definitions. Wings allows you to do all these things very quickly and simply. Defining buttons can be automatic and there won't be many occasions where you will need to use the manual mode. The most common alteration required is to change the name chosen by Wings! Moving button definitions is really easy too and you can even move them between pages.

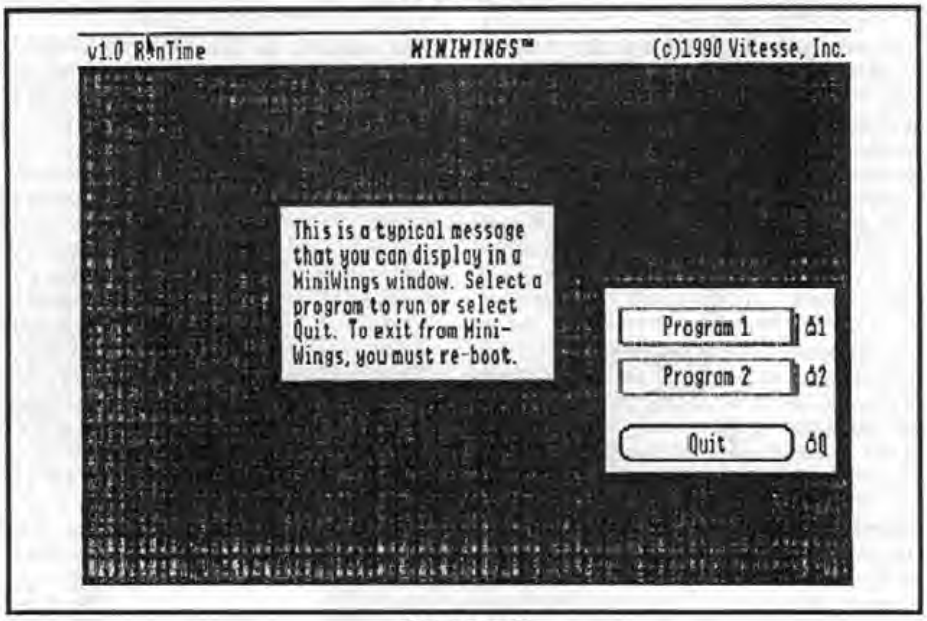
MiniWings:

This is just a program launcher and is considerably different than Wings. First it only launches programs and the screens are completely different. Many users might find the construction of MiniWings screens to be a mite difficult even though the method of construction is very well documented. This is because script files (read programs) have to be written before MiniWings can be used. There are two ways in which MiniWings can be used:

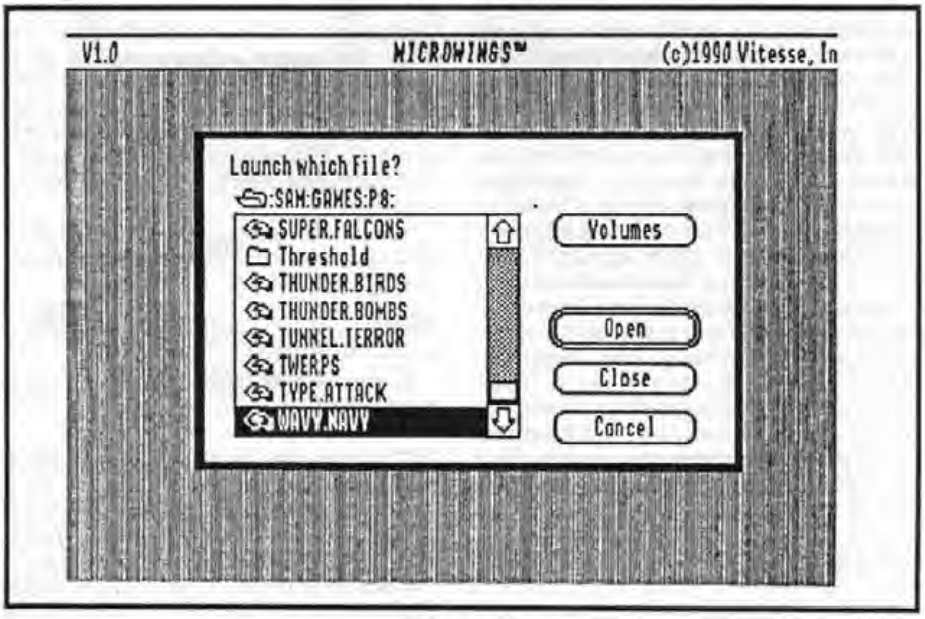
1) The GS/OS system file MiniWings together with a script file can be used



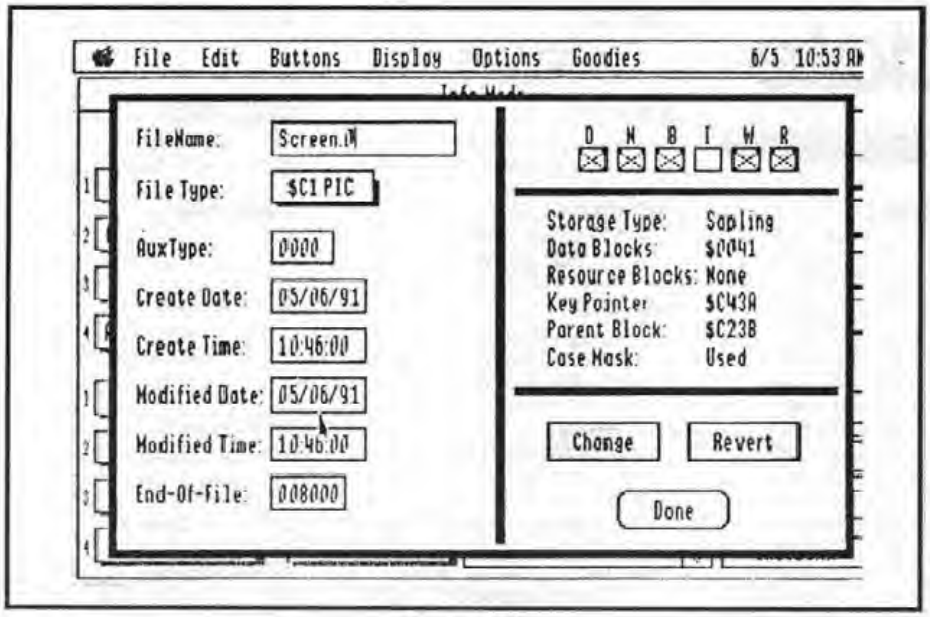
Screen 1



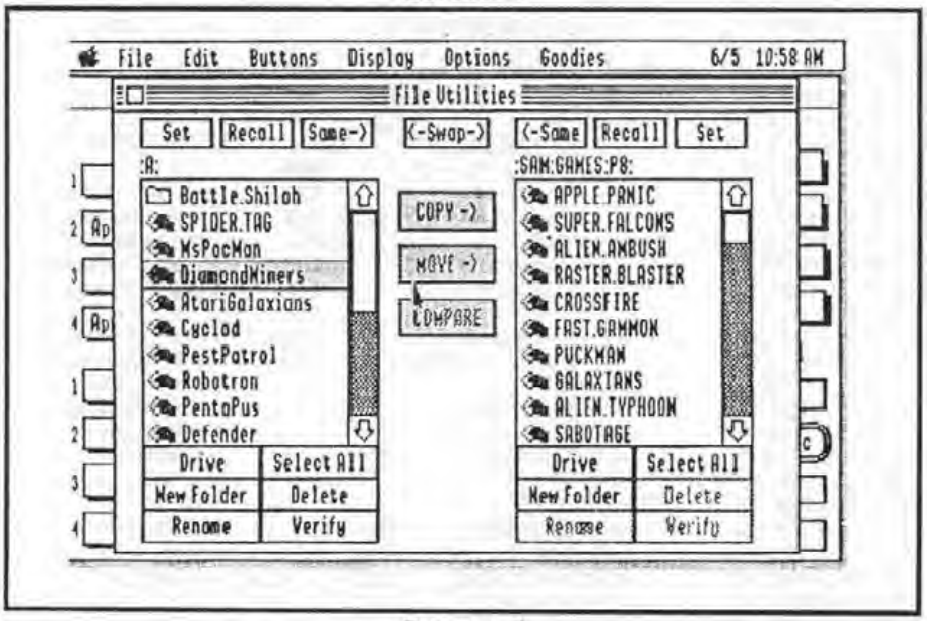
Screen 2



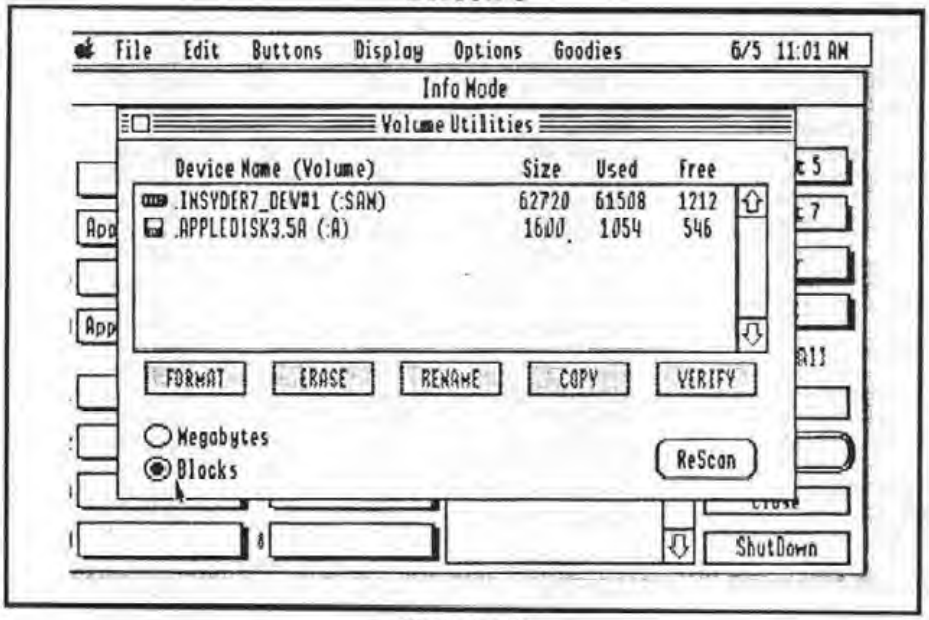
Screen 3



Screen 4



Screen 5



Screen 6

as a program launching system. MiniWings uses this script file to determine the launching screen.

2) Alternatively you can use a compiling program MW.COMPILER to compile a script file into a GS/OS system file that can be used as a stand-alone program launcher.

The Script language I found difficult to remember even though it has only thirteen different statements it is quite a powerful language. For instance there are 10 different backgrounds to choose from or you may load in your own background stored in a 640 by 200 Super-Res PIC file on your disk. You can also define the position of messages and the launching buttons on the screen to produce really neat custom-made launching programs. You may use the MiniWings program to test you scripts prior to compiling them.

I quickly emended a demonstration script file to produce screen 2:

MiniWings launching programs only take up about 15K of space compared with Wings which needs over 200K. The program is very useful for making launching screens that restrict the use of the computer for some users; to make demonstration packages or for people only requiring a limited choice for their work.

MicroWings:

This is one of those very simple programs that makes one wonder 'why didn't I think of that'. All it is is a three block GS/OS system file that produces as window and allows one to choose volumes and files. This great for users with a single 3.5" disk drive, if they still exist. See screen 3:

Conclusions:

Salvation Wings is a very nice program launching and disk management system, however, for the price it is rather expensive for what you get. Users who like the desktop interface will, no doubt, find this an excellent product.

Dave Ward

info

Product : Wings
Publisher : Salvation
Available from :
MGA SoftCat
41 Cinque Port Street
Rye
East Sussex TN31 7AD
0797-226601
Price : £79.95 WYSIWYP

Value :
Performance :
Documentation :

Library Update

/XTRASGS.TOOLKIT/ **Disk 2GS049**

=SHRINKIT.GS	DIR	1	4-MAY-91	
=GSHK	S16	212	19-JAN-91	
=BUG.REPORTS	TXT	8	16-JUN-90	
=SHRINKIT.ICONS	ICN	20	29-JUN-90	
=GSHK.DOCS	TXT	59	13-JAN-91	
=README	TXT	14	19-JAN-91	
=VIRUS.RX	DIR	1	4-MAY-91	
=RX.GS	S16	35	12-FEB-91	
=RX.GS.DOC	TXT	33	12-FEB-91	
=DEFANGED.VIRUS	SYS	3	10-FEB-91	
=RX.GS.DATA	BIN	8	12-FEB-91	
=DESK.ACCESSORY	DIR	1	4-MAY-91	
=SUPER.INFO	DIR	1	4-MAY-91	
=SI.ICONS	ICN	8	22-NOV-90	
=SUPER.INFO.II	NDA	98	25-FEB-91	
=SI.PROGRAMMING	DIR	1	4-MAY-91	
=SI.PROG.MANUAL	TXT	43	15-FEB-91	
=SI.VOL.S	TXT	23	20-NOV-90	
=SI.VOL.MACS.S	TXT	6	9-NOV-90	
=SI.CMD.S	TXT	3	9-NOV-90	
=SI.NAMES	FTD	1	11-NOV-90	
=SI.MODULES	DIR	1	4-MAY-91	
=ASCII.CHART	TXT	8	11-NOV-90	
=FILETYPES	TXT	12	31-OCT-90	
=FILE.INFO	LDF	19	9-FEB-91	
=PREFIXES	LDF	12	11-FEB-91	
=SYSTEM	LDF	6	26-NOV-90	
=TOOLSETS	LDF	7	14-FEB-91	
=VOLUMES	LDF	6	26-NOV-90	
=SI.MANUAL	TXT	51	9-FEB-91	
=NIFTY.LIST	DIR	1	4-MAY-91	
=FTYPE.NL	FTD	1	16-JUL-90	
=WRITING.MODULES	DIR	1	4-MAY-91	
=E16.NLIST	TXT	6	5-FEB-91	
=SAMPLE.AII	TXT	11	16-JUL-90	
=SAMPLE.MAKE	TXT	1	16-JUL-90	
=WRITING.MODULES	TXT	27	5-FEB-91	
=TEMPLATES	LDF	8	23-JAN-91	
=TEMPLATE.MANUAL	TXT	10	23-JAN-91	
=NLIST.REV	TXT	64	5-FEB-91	
=NLIST.MANUAL	TXT	49	5-FEB-91	
=M16.DEBUG	TXT	1	20-DEC-90	
=DESK.ACCS	DIR	1	4-MAY-91	
=BB	LDF	12	5-FEB-91	
=GOODIES	LDF	27	5-FEB-91	
=NIFTYLIST.CDA	CDA	90	5-FEB-91	
=NLIST.DATA	TXT	116	5-FEB-91	
=WRITE.IT	DIR	1	4-MAY-91	
=WRITEIT	NDA	29	28-APR-90	
=ABOUT.WRITEIT	TXT	12	28-APR-90	
=FILE.MANAGER	DIR	1	4-MAY-91	
=FILE.MANAGER	NDA	90	4-FEB-91	
=FM.DOC	TXT	76	25-JAN-91	
=FM.REG.FORM	TXT	4	25-JAN-91	
=READ.FIRST	TXT	6	4-FEB-91	
=FONT.DA.V2.0	DIR	1	4-MAY-91	
=FONT.DA.2.0	NDA	44	23-MAR-90	
=FONT.DA.DOC	TXT	10	4-MAY-91	
=LIST.SYSTEM	DIR	1	4-MAY-91	
=LIST021.DOC	TXT	86	24-JUL-90	
=LIST.CONFIG	BIN	1	19-AUG-90	
=LIST.SYSTEM	SYS	74	24-JUL-90	
=LIST.LAUNCH	SYS	3	13-JUL-90	

HyperStudio Demo and Sample disks

/HS.01/ **Disk HS01**

=HS.SYSTEM	LIB	989	29-APR-91
=SHRINKIT.ICONS	ICN	20	29-JUN-90
=GSHK	S16	212	19-JAN-91
=GSHK.DOCS	TXT	59	13-JAN-91
=README	TXT	14	19-JAN-91

/HS.02/ **Disk HS02**

=ORANGE.APPLE	LIB	798	29-APR-91
=MUSTANG.STACK	LIB	757	29-APR-91

/HS.03/ **Disk HS03**

=MAD.OF.ROLAND	LIB	874	29-APR-91
=FLOP.FLOP	LIB	641	29-APR-91

/HS.04/ **Disk HS04**

=T.TRAVEL.DEMO	LIB	1127	29-APR-91
=ST.TN6.DEMO	LIB	269	29-APR-91

/HS.05/ **Disk HS05**

=XCMND.SUITE	LIB	1128	29-APR-91
=JEAN.MORGAN	LIB	302	29-APR-91
=SCAN.SCROLL.XCD	LIB	50	29-APR-91

/HS.06/ **Disk HS06**

=MESSERSCHMIDT	LIB	1049	29-APR-91

/HS.07/ **Disk HS07**

=HYPERBOLE.SAMP	LIB	955	29-APR-91

/HS.08/ **Disk HS08**

=S.SMITH.XCMND	LIB	945	29-APR-91

/HS.09/ **Disk HS09**

=S.SMITH.PLAYER	LIB	697	29-APR-91

/HS.SYSTEM/ **Disk HS10**

=PRODOS	SYS	5	7-MAR-90	
=SYSTEM	DIR	1	5-DEC-90	
=SYSTEM.SETUP	DIR	1	27-NOV-90	
=SNS.SP.PIC	PNT	24	27-NOV-90	
=SNS.SP	TIF	4	27-AUG-90	
=APPLEIIVOC.INIT	TIF	1	14-JUN-89	
=FONTS	DIR	1	27-NOV-90	
=CENTURY.18	FON	8	20-MAY-89	
=CENTURY.24	FON	11	20-MAY-89	
=COURIER.12	FON	7	27-NOV-86	
=GENEVA.12	FON	7	27-NOV-86	
=LOS.ANGELES.24	FON	15	21-MAR-87	
=ICONS	DIR	1	27-NOV-90	
=HS.ICONS	ICN	24	13-SEP-89	
=HSTUDIO.DEMO	S16	305	10-MAY-90	
=HOME.STACK	HMD	112	12-MAR-90	

/HS.DEMO/ **Disk HS11**

=ART.LIBRARY	HMD	126	8-MAR-90
=BOOKSHELF	HMD	17	8-MAR-90
=BUTTON.IDEAS	HMD	34	8-MAR-90
=CARD.IDEAS	HMD	35	8-MAR-90
=FAMILY	HMD	99	8-MAR-90
=HOME.STACK	HMD	112	12-MAR-90
=INTRO.1	HMD	76	8-MAR-90
=INTRO.2	HMD	126	8-MAR-90
=INTRO.3	HMD	78	8-MAR-90
=INTRO.4	HMD	110	8-MAR-90
=NOTEBOOK	HMD	26	12-NOV-89
=READ.ME	HMD	97	8-MAR-90
=RWP.STACK	HMD	122	8-MAR-90
=SATURDAY	HMD	71	8-MAR-90
=SOUND.SHOP	HMD	31	8-MAR-90
=SPANISH	HMD	65	8-MAR-90
=TEST.RESULTS	HMD	17	1-APR-90
=TEST.STACK	HMD	106	22-FEB-90
=HS.TEST.RESULTS	TXT	1	1-APR-90
=HENRY	PNT	30	7-FEB-90
=SPANISH.PIC	PNT	46	31-MAR-90
=WORLD.MAP	PNT	22	31-MAR-90
=HELLO	SND	21	13-OCT-89
=MUSIC.1A	SND	50	8-MAR-90
=PASSPORT.SPAN	SND	32	14-OCT-89
=SENORITA.SPAN	SND	23	8-MAR-90
=SMALL.DOG	SND	13	8-MAR-90

/HS.SOUNDS/ **Disk HS12**

=PRODOS	BIN	18	10-SEP-89
=JUKEBOX	HMD	26	8-MAR-90
=APPLAUSE	SND	85	10-OCT-89

=BEAM.DOWN	SND	79	10-OCT-89
=BROOK.RPT	SND	48	10-OCT-89
=BUGLE	SND	81	10-OCT-89
=DRAMA1	SND	83	10-OCT-89
=DRAMA2	SND	60	10-OCT-89
=ELEC.HARP	SND	87	10-OCT-89
=ELEPHANT	SND	64	10-OCT-89
=FUNKY.BELLS	SND	60	10-OCT-89
=GLASS.BREAK	SND	71	10-OCT-89
=HARP1	SND	53	10-OCT-89
=HARP2	SND	58	10-OCT-89
=KORG	SND	69	10-OCT-89
=LION	SND	67	10-OCT-89
=MONKEY	SND	58	10-OCT-89
=NIGHT.FROGS	SND	27	10-OCT-89
=PARROT	SND	20	10-OCT-89
=PASSPORT.SPAN	SND	38	10-OCT-89
=SCALE.HI	SND	51	10-OCT-89
=SCALE.MED	SND	93	10-OCT-89
=SENIORITA.SPAN	SND	26	10-OCT-89
=SMALL.DOG	SND	30	10-OCT-89
=STAIR.BONK	SND	36	10-OCT-89

/MORE.STACKS/ **Disk HS13**

=HOME.STACK	HMD	15	8-MAR-90
=HYPER.BRAIN	HMD	439	8-MAR-90
=MOUSE.ADVENTURE	HMD	164	8-MAR-90
=OP.ILLUS	HMD	158	8-MAR-90
=SOLAR.SYSTM	HMD	328	8-MAR-90
=BUGLE	SND	81	28-APR-89
=IOWA	HMD	155	8-MAR-90

/MORE.STACKS2/ **Disk HS14**

=BIRDS	HMD	175	8-MAR-90
=CAT	HMD	250	8-MAR-90
=CHESSMOVES	HMD	399	8-MAR-90
=HYPERMAGIC	HMD	318	8-MAR-90
=COMPUTER.STACK	HMD	390	8-MAR-90
=HOME.STACK	HMD	11	5-OCT-89

/HS.ART2/ **Disk HS15**

=HS.CLIP.DOC	TXT	3	31-AUG-89
=ANIMALS	DIR	1	28-NOV-90
=ANIMALS.1	PNT	26	18-DEC-89
=ANIMALS.2	PNT	25	18-DEC-89
=ANIMALS.3	PNT	20	18-DEC-89
=ANIMALS.4	PNT	21	18-DEC-89
=ANIMALS.5	PNT	24	18-DEC-89
=ANIMALS.6	PNT	23	28-NOV-90
=ANIMALS.7	PNT	18	18-DEC-89
=ANIMALS.8	PNT	21	18-DEC-89
=ZOO	PNT	19	18-DEC-89
=TRANSPORTATION	DIR	1	27-NOV-90
=AIRCRAFT	PNT	12	14-AUG-89
=TRAINS.2	PNT	13	16-AUG-89
=TRANSPORT	PNT	16	3-AUG-89
=TRANSPORT.2	PNT	14	17-AUG-89
=TRANSPORT.3	PNT	15	17-AUG-89
=TRANSPORT.4	PNT	19	21-AUG-89
=BUILDINGS	PNT	25	29-DEC-89
=HOUSEHOLD	PNT	22	22-JAN-90
=HOUSEHOLD.2	PNT	19	18-AUG-89
=JOBS	PNT	23	22-JAN-90
=OFFICE	PNT	18	20-AUG-89
=CARDS	PNT	26	18-DEC-89
=FLAGS	PNT	17	15-AUG-89
=MISC.1	PNT	22	18-DEC-89
=MISC.2	PNT	23	18-DEC-89
=SIGNS.1	PNT	19	22-JAN-90
=SIGNS.2	PNT	17	3-AUG-89
=SPORTS	PNT	23	22-JAN-90
=SPORTS.2	PNT	19	14-AUG-89
=MILITARY	PNT	10	14-AUG-89
=MUSIC.1	PNT	14	14-AUG-89
=MUSIC.2	PNT	18	14-AUG-89
=NAUTICAL.1	PNT	17	14-AUG-89
=NAUTICAL.2	PNT	16	14-AUG-89
=SPACE.1	PNT	17	12-AUG-89
=SPACE.2	PNT	17	12-AUG-89
=COMPUTERS	PNT	17	14-AUG-89
=FOOD.1	PNT	17	14-AUG-89
=FOOD.2	PNT	19	14-AUG-89
=FOOD.3	PNT	18	14-AUG-89
=FOOD.4	PNT	17	17-AUG-89
=FOOD.5	PNT	19	21-AUG-89
=PLANTS	PNT	21	14-AUG-89
=SEALIFE	PNT	17	14-AUG-89
=FUNNY	PNT	22	18-AUG-89
=FUNNY.2	PNT	24	18-AUG-89
=FUNNY.3	PNT	21	19-AUG-89
=SYMBOLS.2	PNT	19	18-AUG-89
=TOOLS	PNT	19	14-AUG-89
=TOOLS.2	PNT	12	18-AUG-89
=TOOLS.3	PNT	17	18-AUG-89
=PEOPLE	PNT	24	15-AUG-89
=PEOPLE.2	PNT	24	18-AUG-89
=PEOPLE.4	PNT	26	21-AUG-89
=PLACES	PNT	27	16-AUG-89
=PLACES.2	PNT	26	18-AUG-89
=PLACES.3	PNT	28	22-AUG-89
=TOYS	PNT	18	27-AUG-89
=HYPERSHOW.TXT	TXT	3	12-NOV-89
=SLIDESHOW	HMD	15	27-NOV-90
=HS.XCMD	LDF	6	15-OCT-89

/MUG.087/ **Disk HS16**

=READER.STACK	DIR	2	7-MAR-90
=READ.AND.LISTEN	HMD	297	8-MAR-90
=BUGLE.SND	SND	81	31-JUL-89
=GIRL.SND	SND	51	31-JUL-89
=TRY.AGAIN.SND	SND	33	31-JUL-89
=DADDY.SND	SND	60	31-JUL-89
=BOY.SND	SND	52	31-JUL-89
=LION.SND	SND	67	31-JUL-89
=DOG.SND	SND	53	31-JUL-89
=DRUM.SND	SND	65	31-JUL-89
=CAT.SND	SND	86	31-JUL-89
=COW.SND	SND	88	31-JUL-89
=OWL.SND	SND	83	31-JUL-89
=BEE.SND	SND	106	31-JUL-89
=FROG.SND	SND	47	31-JUL-89

/USA/ **Disk HS17**

=USA.HOME	HMD	117	8-MAR-90
=AZ.STACK	HMD	324	12-MAR-90
=GND.CYN.STE	SND	273	13-OCT-89
=DOC	TXT	6	13-OCT-89
=AMERICAN.HIST	HMD	442	12-MAR-90
=HOME.STACK	HMD	9	12-MAR-90

/COM.STACK/ **Disk HS18**

=MODEL.STACK	HMD	434	8-MAR-90
=COMINFO1.STACK	HMD	369	8-MAR-90
=COMINFO2.STACK	HMD	436	8-MAR-90
=HOME.COMST	HMD	114	8-MAR-90

/VIDEO.DEMO/ **Disk HS19**

=HOME.STACK	HMD	30	8-MAR-90
=DOWNLINK	HMD	74	8-MAR-90
=EARTH	HMD	29	8-MAR-90
=EARTH.2	HMD	27	8-MAR-90
=USA.STACK	HMD	22	8-MAR-90
=CALIF	HMD	48	8-MAR-90
=MASS	HMD	36	8-MAR-90
=VOYAGER	HMD	40	8-MAR-90
=BIRDBOOK	HMD	205	8-MAR-90
=THE.88.VOTE	HMD	674	8-MAR-90
=VOC	HMD	14	8-MAR-90
=BIOSCI	HMD	42	8-MAR-90
=ELEPHANT	SND	64	9-SEP-89
=LION	SND	67	9-SEP-89
=MONKEY	SND	58	9-SEP-89
=PARROT	SND	32	9-SEP-89
=ANIMALS	HMD	73	8-MAR-90
=DREAMS.V2	HMD	36	8-MAR-90

❑ Order library disks from the PO Box in Liverpool. Disks cost £4.00 each inc VAT and P&P. Ten disks cost £30.00 and the full twenty disks will cost £65.00.

Who famed Roger Wagner?

The Watson Report examines the legend that became Roger Wagner All in glorious HyperStudioColour

I believe that Dave Ward was initially the person responsible for the 'happening' on Saturday, 27 April. International telephone calls, much whispering, hurried arrangements, and a lot of co-operation finally led to a band of Apple users descending on Bidmuthin's offices in Pinner.

Roger Wagner, publisher of HyperStudio for the Apple IIgs, was holidaying in England. He would need his 'fix' of talking to other Apple enthusiasts. "Consider it done," said Dave, Apple2000 reviewer of HyperStudio and Secretary of Midapple (the Independent Apple Users' Group in the West Midlands).

Dave made a swift 'phone call to Ewen Wannop, Chairman of Apple2000 (Britain's only national Apple Computer Users' Group to cater for all Apple Users).

"I'll fix it," said Ewen.

Steve Morrisby, proprietor of Bidmuthin Technologies (one of the few dealers in this country to cater for the Apple II community) said "Sure, come on down."

We did.

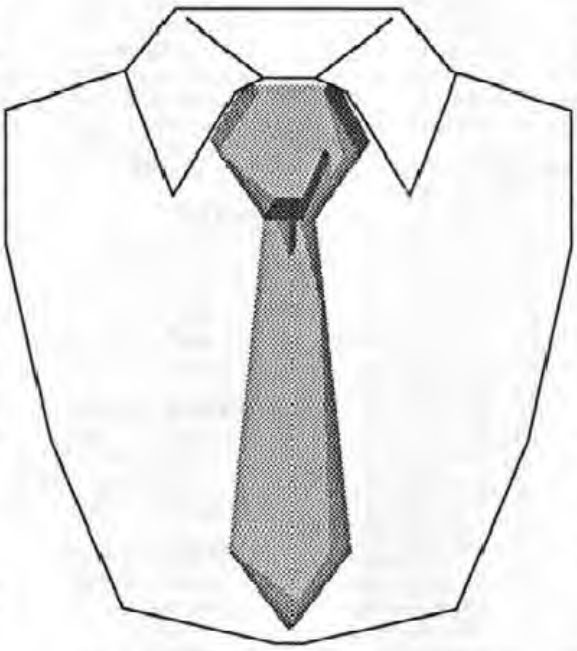
Dave and I started out at the crack of dawn (well almost). I met my milkman for the first time in many years.

Dave had some business to attend to in Chiswick at eight. That duly completed we landed in Bidmuthin's car park at nine.

Over the years we had got to know the folks at Bidmuthin very well but only by telephone. Today was to be a chance to put some faces to names. Huw was there to greet us. Mark was busy at a Mac LC putting the //e option card through its paces. Steve was bustling around making sure that everything was going to work to schedule.

"There's coffee on 'perc,' and there's soft drinks, beer and wine in the fridge. Help yourself". We sampled the coffee and all was good with the world.

Roger was due at ten. He had insisted on coming by public transport. Where was he? It was ten thirty. Steve went to find him. He did - somewhere near Pinner station. It was not difficult to spot a travelling Apple man. [Clue - large black carry bag]



Familiar faces began to appear. There was Ewen, Elizabeth, Irene and Dave from the Apple2000 committee and so many others that if I try to name them all I shall fail and doubtless offend.

We met Frank Thorley from Midapple who was 'weekending' in the area. I met Jim Parkes, an Apple buff who I have known for years 'telephonically' but until this day had never met.

People circulated and exchanged news and views of the Apple community. It was just like a garden party. We all had one thing in common. Conversations flowed, new friendships were made and telephone numbers written on scraps of paper.

But what was Roger up to ?

He was having problems setting up the equipment. The Apple IIgs he was using would not recognise the hardcard (oops, PC term, I mean internal hard disk drive) that he had brought with him.

Now, can you imagine a roomful of largely Apple IIgs users gathered together most of whom 'know' what is the problem.

"Have you set the Control Panel?"
"What about the SCSI id numbers?"
"Do you have SCSI DMA incompatibility?"
"Does anyone have a terminator?"

... and so on it went.

Eventually Roger gave up and the ensuing demonstration relied on loading from a 3.5" drive.

Roger introduced himself although by then it was hardly necessary.

He embarked on the history of how he got into computers. His delivery was reminiscent of the presentation that Steve Wozniak (Woz, designer with Steve Jobs et al of the Apple computer) made to Apple Users at the AppleWorld exhibition in London in 1986. Same style.

"I had left college and had my first few dollars to spend. I had a choice of a motorcycle, a hi-fi or an Apple computer. I decided that I would opt for the computer. It had everything and I would not have to spend any more money on it !!!"

"I begin to write some utilities and someone suggested I could market them."

And so he went on...

We broke for lunch during which time Mark had changed the Ramcard. We were back in business.

The demonstration took on a new look as we were shown the full potential of HyperStudio GS.

To end the day we were given a personal view of the famous Roger Wagner tie and Ewen presented him with one of the equally famous Apple2000 eyebashing ties ..

Our thanks to Roger (an old friend by now), to Dave Ward for making the event possible, to Ewen for organising it and to Steve, Huw and Mark for the hospitality.

SoftCat Corner

THE LAST ONE?

I hope you, like myself, enjoyed the Apple 2000 1980/90 Souvenir Edition? One thing that struck me as odd was the inclusion of the full-page ad for "The Last One", (an Applesoft Basic program generator), on page 25. Anyway; we're pleased it was included, as it gives us some free advertising! You see, MGA SoftCat are the sole worldwide publisher of The Last One, which is still available in DOS 3.3 AppleSoft, or CP/M MBasic versions, either at £49.95*. So if you want to write a program, but rid yourself of most of the tedium of the actual coding, have a look at the ad, and give TLO a whirl.

Hand-Scanners ReVisited

Since my last mention of Quickie & InWords, the following price changes have come into effect. Quickie £229.00*, Quickie Bundle £249.00*, Quickie Update £99.95, InWords £129.00*. However; if you buy InWords at the same time as any Quickie package, InWords will cost just £100.00*.

Many people have suggested that a hand scanner with a scan window of just 4.5" isn't much good, as the type of graphics they want to scan are quite often much bigger than this. Good point, but definitely not an insurmountable problem. The solution is very simple - reduce the original to a size that the scanner will handle. The best way to do this is to get your local printer to photo-reduce the pic required, and he will probably charge between £5-15 per item depending on volume. I would only suggest doing this if its a pic you'll use a lot, such as company logo etc. Personally, I have had great success just using our office photocopier. I did a sailing regatta poster the other day, and the graphic used came from a graphic artist's clip-art book, and was A4. A fast 0.5 copy produced a small pic which my scanner easily handled, and then I expanded the 400dpi graphic back up to A4 in my DTP system, and the results were excellent.

If you have an ImageWriter, or access to one, you can scan full page images using "ThunderScan" which is a scanning device which replaces the normal ink ribbon in the printer, - cost £219.00*.

Mousing around

Harry Markham's letter pp3 Dec'90 issue regarding mouse prompts me to advise you on Apple UK's remarkable prices for these little jollies:-

MouseCard // £170.64, Mouse £86.34, - crazy, right?, especially when the price for mouse+card was only £155.25 when they were readily available... Anyway; for those of you who do want a //e mouse, we can help, as we can get you a USA import of the genuine Apple //e mouse (with card) for just £139.95*. If you've got a //c or Laser-128, then you can use our budget C-820 mouse at just £39.95.

For anyone interested in rewriting existing applications to make use of the mouse, we can also supply Apple's own "Apple II DeskTop Toolkit v1.0B5 for ProDOS @ £49.95*. This is a library of routines that support Mouse Text and/or double hi-res for the Apple II family. The library also manages the desktop environment, which includes pull-down menus, windows, cursors, and event handling. The MouseText ToolKit manual and disks manage these activities in text mode. The Mouse Graphics ToolKit manual and disks provide equivalent functions in graphics mode. This package includes graphics primitives. Requires 128K computer, and includes four 5.25" disks and 336 pages of documentation.

Additionally, we can supply a Pascal version of the desktop toolkit at the same price.

RECORD MASTER

Record Master reviewed on pp22/23 in Dec'90 issue in fact now costs just £49.95*. Derek Blackburn, I believe, was quite right in his appraisal of the package's performance/price ratio, however; the important thing about MGA SoftCat's introduction of Record Master to the UK market is to provide a useful database package which will work on a 'plain vanilla' 48K Apple][+. Obviously, if anyone has a //e or GS they should be looking to AppleWorks or DB Master to provide their database requirements. Although AppleWorks can be shoehorned into a][+, the additional hardware/software requirements will raise a hefty extras bill.

At the end of the day, Record Master is the only real option available to the 1979 vintage][+ user...

Interestingly, Bridget Software have recently bundled Record Master with the other two 'Master' programs reviewed at an all-in price of £75.00*, a saving of £39.95 on the normal prices.

C for yourself

Ref: Brian Gooch letter pp5 Feb'91

"C" is most certainly available for the Apple II. Manx Software Systems of New Jersey have been producing various C's for Apple II, IBM-PC, Macintosh, Atari-ST, and Amiga since 1985 or earlier! Current editions for Apple II include: "Aztec C-65a DOS 3.3 Apprentice System" at £39.95*, (see Apple 2000 review pp32-34 Apr'88); Aztec C-65r C'Prime Dos 3.3 at £75.00*; Aztec C-65d Developer Dos 3.3 at £199.00*; Aztec C-65c Commercial ProDOS system at £299.00*. In addition, there are IBM-PC and Macintosh hosted cross-development systems for developing ProDOS or DOS 3.3 C programs on those hosts (around £750.00*). Programs produced with Aztec C-65 ProDOS or DOS 3.3 are easily ported to other micros, (see list above).

//c RGB vs IBM-PC RGBI/CGA

Ref: Jalan Senyum letter pp6 Feb'91

The PeaCock RGB device mentioned is available in the UK from MGA SoftCat at £87.40. However, the suggestion that Apple //s can use IBM-PC type CGA monitors is misleading. Indeed; the Philips CM-8833 **can** be run from the Peacock, or other Apple][+ or //e with suitable RGB card, but it is **not** strictly speaking an IBM-PC CGA monitor. In fact, the CM-8833 has provision for the connection of RGB (Apple II & others), RGBI (IBM-PC CGA etc), **and** PAL composite (European Apple //e direct, and others.

The only way I know of for Apple IIs to use true IBM-PC RGBI/CGA monitors is a //e with the RAMworks ColorLink Option, (additionally, all Laser-128s have this type of output as standard).

Smooth Talking

Ref: Jalan Senyum letter pp7 Feb'91

Smooth Talker for the Apple IIGS has now been repackaged and repriced at £99.00*. This price includes six disks for classroom use, - but there is no lower single user price. A Macintosh version is also available at the same price, while Amiga & IBM-PC editions cost £89.00* each.

Scanning around some more

Ref: Jalan Senyum letter pp7 Feb'91

InWords, the OCR software for the Quickie scanner costs £129.00*, or just £100.00 if purchased at the same time as Quickie, Quickie Combo, or Quickie Update. We will happily lend a scanner with InWords to any member who will write a review for the magazine, (contact E Littlewoood via the Apple 2000 P O Box, or telephone).

Accounting for personal tastes

Ref: Bob Wileman letter pp7 Feb'91

There are three personal finance packages readily available at this time for the Apple //: Broderbund's £49.95* "On Balance", MECA's £129.95* "Andrew Tobias: Managing your money", and the third major league player still on the field is "Quicken" by Intuit at £49.95*. (maybe Bob would like to do a review?).

Yours with good cheer ... Jon Gurr
(Apple II Product Manager, MGA SoftCat)

AppleSoft Program Documenter

Peter Davis reviews Bob Merril's excellent ShareWare program

Bob Merril's AppleSoft Program Documenter

Having run this program a message comes up on the screen which seems to say it all (see Figure 1).

Have you ever written a BASIC program, and then come back to it a few months later, wondered whether you wrote it, speculated at the meaning of all the variables, failed to recall the full purpose of some subroutine, spent time searching the literature for the function of some weird POKE ? Well help could be at hand.

Adequately documenting Basic programs is a problem. There are several opinions about how this is best done.

If you conscientiously use REM statements at the top of program listings to define the meaning of variables, and annotate each subroutine, well that's fine. Unfortunately with larger programs the price to be paid is slow operation. Some people get round this by using a compacting utility like Beagle's D.CODE which permits you to have two versions of the program, the long one which explains everything, and a compressed version which operates at reasonable speed, but is unreadable.

I sometimes find that a large number of REM's sprinkled through a program seem to impair its readability. Obviously you can document your program using a Word Processor. This is where ADOC gives you a flying start by automatically giving you an XREF of variables, subroutines, CALLS, PEEKS, and POKES, all of which can be easily annotated with the small text editor, which asks you to provide a brief explanation for each item.

Essentially ADOC analyses a Basic program on disk. The results of your commentary are saved to disk, or may be printed on your printer. For convenience in annotation the program contains a dictionary of 58 documented CALL, PEEK, and POKE locations.
If your program line is :

```
"10 PEEK (49040)"
```

The automatic comment is:

```
"$BF90 - DATELO - ProDOS Date - high byte"
```

Sometimes the annotation is expressed in terms of the Hex location or alternatively in terms of the Monitor subroutine.

ADOC has been designed to work on any Apple, from the original II to the IIgs. If you want to document a DOS 3.3 file, then use a utility program such as Copy II Plus to transfer the BASIC program from DOS 3.3 to ProDOS. ADOC requires ProDOS 8 and BASIC.SYSTEM.

About the program in use

There are AWP instructions, plus a suite of programs all which fit easily on one side of a 5.25" disk.

Figure 1

```
APPLESOFT PROGRAM DOCUMENTER  1.9.1

By

Robert M. Merrill

Copyright  (C) 1988

All Rights Reserved

YOUR.PROG's cross-reference and documentation file has
been saved to disk.  The  YOUR.PROG.D file is for
reuse with this documentation program at any time,
YOUR.PROG.T is an ASCII text file, ready for your word
processor.

Put output to printer ? (Y/N)
```

ADOC is a SYS file (actually BIN at $2000) which is initiated by a Basic STARTUP program required to punch in the date and the selected printer codes (BIN) for supported printers; EPSON, GEMINI, PANASONIC, APPLE DMP/IMAGEWRITER, PROWRITER/ C-ITOH/NEC8023A, OKIDATA, IDS 480. (ADOC does not run properly without this initiation.) STARTUP "begs for bucks" and comes with options for creation CUSTOM printer codes, printing documents and return to Basic.

There are 3 additional Basic programs on disk, each with companion ADOC type .D and .T files. These files (PRINTER, TEST, VAR.READER) are intriguing in their own right; they give you the chance to see examples of how one might document Applesoft programs. VAR.READER is really a separate application, which can be CHAINed onto almost any Basic program to display the values of variables to your screen or printer.

There is option for 40 or 80 column screen, you are offered a Prefix or Slot and Drive to look at. You are presented with a list of files for you to select. Having typed in the name, there is some disk activity and line numbers flash by. As the program loads you see at the bottom of the screen:

```
Working on line No 12130
Total Blocks 37 to 50
```

The program must be used on a disk that has extra storage space equal to about two to three times the size of your program. If your program occupies, say, 20 blocks on the disk, you must be sure there are at least 40 free blocks on the same disk - they will be needed to save the TXT and $F1 files associated with your program's documentation.

After entering descriptions, you may save the entire list for future reference by ADOC as a (type $F1 file). You may also save the list as a standard text (TXT) file that includes the program name and date when the file was created. Or if you want a hard copy, ADOC will print out the list.

Figure 2 shows how the document appears.

If you subsequently change a variable in a program that has already been documented, the change is flagged by a message:

```
A$ Number of occurrences 0
No longer used, may be erased
   (purged) with OA-E
```

Good Points

Printout appears with large, bold for comments, small faint for line numbers. Probably rather easier to read than this text.

The Text editor has a good Help Screen. It is needed because some of its features are non-intuitive.

```
^-B - Go to beginning of line.
^-C - Copy preceding line.
^-D - Delete character under
      cursor.
^-E - Erase (purge) displayed
      item.
^-I - Toggle insert/replace mode.
^-L - Case toggle.
^-N - Go to end of line.
^-P - Print all data on printer.
^-Q - Quit the program.
^-R - Rewrite (restore) the line.
^-S - Save the data to disk.
^-Y - Truncate from cursor to
      end.
 RETURN - Accept the line as
      shown.
 ESCAPE - Go back to first item.
 LEFT-RIGHT ARROWS - Move cursor
 UP-DOWN ARROWS - Move to next
      item.
^-UP-DOWN ARROWS - Move by 10
      items.
^ = Either CTRL or OPEN APPLE
      Key.
^-J - Same as RETURN.
^-K - Go back one item.
^-= CTRL key (hold with key
      shown).
```

I have tried ADOC on some very large programs, where all sorts of things normally start to go wrong. It has no difficulty in handling programs of this kind.

Niggling Points

The program is solid to the extent that I have not been able to crash it or to lose data, but there have been occasions (never reproducible so far) when I have wondered about what was going on.

When you write a line and you decide to use one of O-A commands the line of text is always lost, ie OA-R fails.

Although ampersand commands are identified, added Basic commands are not.

CALL 4 * 4096 is truncated to "CALL 4". CALL K is documented as "CALL to a variable", which is not overly helpful.

It is a problem to hit the end, the last PEEK. Nothing crashes but it takes a few tries to avoid getting sent back to the start point. Nothing so simple as OA-9.

It would have been nice to have had some greater attention paid to identification of arrays.

I would have preferred it if ADOC exited to BASIC.SYSTEM rather than the normal ProDOS Quit call. However that feature can be arrived at by using a Launcher.

VAR.READER

VAR.READER is a modified version of the program gleaned from the pages of Tom Weishaar's A2-Central publication. (OPEN-APPLE Jun 86 vol 2 pp 35-38) There are two methods by which it may be used:

1. At any point within your operating program enter a STOP or stop with a CTRL-C from the keyboard. Then type in: CHAIN /ADOC/ VAR.READER

2. If you have used the ProDOS 'STORE' command during your program, then you may RESTORE your variables from the keyboard with RESTORE /PATHNAME/, then type in: CHAIN /ADOC/ VAR.READER

Figure 2

```
> VARIABLE <

 &    (Ampersand Call)
       Example of how an ampersand vector is noted
2: 170, 200
 A$    String variables include the '$' notation
11: 1010, 1020, 2000(2), 2010, 2080, 2100, 3010(4)
 A(    Arrays are shown with the open (left) parenthesis
5: 1000, 2150(2), 2160(2)
 A5    All legal Applesoft variables are located
2: 120(2)
 AMOUNT(   Variable names are included in their entirety
1: 2150
 AW    You may add any comments you like about the variables.
2: 2020, 2150
 D     Var D should = 20000
3: 2, 10, 19
 B1%   Integer variables have the '%' sign as shown
4: 190, 1700, 2500, 5000
 CUBE( Defined Function
       This is how defined functions are noted
2: 50, 190


> SUBROUTINE <

 CALL  -868  CLREOL - Clear text line cursor to right
2: 2000, 2010
 CALL  -958  CLREOP - Clear text cursor to bottom
3: 10, 2110(2)
 CALL  -1205  Non-standard entry points are not documented
1: 150
 CALL  -3288  House clean stack for GOTO from ONERR
1: 90
 CALL  to a variable.
       The particular variable has been previously displayed
1: 150
 CALL  39057  Undocumented calls require your own explanation
2: 30, 510
 CALL  62450  $F3F2 - BKGND - Clear hires screen to black
1: 160
 GOSUB  20  Use GOSUB items to describe the SUB which is referenced
1: 130


> PEEK OR POKE <

 PEEK/POKE  32  Left edge of text window (0-39/79)
1: 20
 PEEK/POKE  36  CH - Horizontal cursor position (0-39/79)
2: 10, 20
 PEEK/POKE  216  ERRFLG - POKE with 0 to turn off ONERR
1: 90
 PEEK/POKE  218  ERRLIN - Line number where error occurred
1: 90
 PEEK/POKE  219  ERRLIN - Line number where error occurred
1: 90
 PEEK/POKE  1403  $57B - Horizontal cursor position (80 col)
1: 20
 PEEK/POKE  to a variable.  Var D = 20000
1: 10
 PEEK/POKE  49152  $C000 - Read keyboard
1: 40
 PEEK/POKE  49168  $C010 - Clear keyboard strobe
2: 40, 2000
```

VAR.READER

In either case the output may be put to SLOT 0 for the Screen or SLOT 1 for your Printer. As he says the bells and whistles are provided by Bob Merril.

Typical output from this feature is seen in Figure 3.

Continued at foot of next page:

HyperStudio™

❑ We had not intended this issue to be entirely given over to Roger Wagner, though it may seem so in places! You will have read William Watson's excellent report on the 'Roger Wagner' day and the editorial reference to it as well. On the actual day Roger donated a total of 24 disks to the Apple2000 library containing demo versions of HyperStudio and also a series of sample HyperStacks and Xcmnds. We have compressed these disks and shrunk them down to nineteen in all and have created a new library category. You will find the disks listed on Pages 28 to 29. Many of the disks are also available direct from Roger Wagner in the 'HyperStudio™ Demo Kit'

These disks come in several groups. Disks HS.01 to HS.09 are individual stacks and demo disks, disks HS.10 to HS.12 make one HyperStudio demonstration set, disks HS.13 to HS.15 are supporting stacks and clip art, and disks HS.16 to HS.19 are a set of demo stacks. If you do not intend to purchase all nineteen disks then consider the grouping as you may find you are missing an important disk!

I have seen multi-media demos on the Macintosh, HyperStudio is their equal without question.

If you do not yet have your copy of HyperStudio, contact Bidmuthin Technologies who will be able to supply you.

Ewen Wannop

Hypermedia Resource Guide & HyperStudio® Demo Kit

Roger Wagner Publishing, Inc. has put together a Hypermedia Resource Guide with over 30 pages of useful information for anyone interested in hypermedia. The guide also comes with a 10-disk set of software for investigating and demonstrating HyperStudio, and hypermedia in general.

The software portion includes a working version of HyperStudio, which is capable of creating stacks, adding video segments, manipulating buttons and cards, etc. The only limitation is that stacks cannot be saved with this demonstration version. In addition to the demonstration version of HyperStudio, we've filled the remaining disks with public domain software downloaded from such popular sources as GENIE, CompuServe, and America Online.

The printed materials in the Hypermedia Resource Guide includes names and addresses of companies that sell digitisers, touch-screens, laserdiscs and players - even a company that will turn a regular VCR tape into a permanent laserdisc for under $300!

Order Form

The Resource Guide is not a profit item for Roger Wagner Publishing, Inc., and is made available **for only $10** (add $10 for International shipping) to recover the cost of the diskettes and printed materials. The kit includes a permission form that once returned to Roger Wagner Publishing, lets you **make copies for others!**

We believe that hypermedia will be one of the major forces in educational computing in the coming years, and that the Apple IIGS is an optimum multimedia machine. This kit will not only give you the tools to get the most out of your own computers, but also provide you with the tools to share this vision of computing with others.

To get your Hypermedia Resource Guide and demonstration disks, simply complete the form below and mail to Roger Wagner Publishing, Inc. with a check or charge card information for $10. You may also call in your order if you wish (619 442-0522). Sorry, but school purchase orders that are not accompanied by payment cannot be accepted for this non-profit item.

Name:

Title/School:

Address:

City/State/Zip:

Country:

I'm enclosing (check one):
Cheque Charge card: MC VISA

Charge Card #:
Expiration Date:
Signature:

Now Mail to:

Roger Wagner Publishing, Inc.
1050 Pioneer Way, #P
El Cajon, CA 92020
USA

Continued from previous page:

Conclusions

This is a very good and professional product. VAR.READER is an excellent extra. To someone doing serious work or just wanting to learn a bit more about BASIC programming I thoroughly recommend the package. This is a useful tool which can save time whether you are trying to master the workings of code written by someone else, just working on your own program or you need another debugging aid.

Some features seem to be to have been arrived at due the desire to retain compatibility with the Apple II II+ IIe and GS.

ADOC is valuable utility to do a job that is altogether too frequently left undone or inadequately done. One or two minor niggles do not take away its obvious utility. This is shareware product and at the low cost of $15.00 it is more than worth the price.

Peter Davis

```
FUNCTION HX DEFINED
MO$ = "MMMJANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
X   = 0
T   = 3
Y   = 91
M   = 5
DA$ = "03 MAY 91"
DD$ = "03"
YY$ = "91"
I   = 4
B $ = " QUIT DO NOTHING "
ARRAY PT$ IS DIMENSIONED (3)
 PT$ (0)  = " "
 PT$ (1)  = "EPSON"
 PT$ (2)  = "GEMINI 10 /PANASONIC"
 PT$ (3)  = "APPLE DMP/IMAGEWRITER"
```

Figure 3

Available from:
Robert M Merril - AKA: BOB
6180 Via Real #25
Carpinteria
California 93013 USA
Telephone:010/1/805/684/3366

Not only but also:
The ADOC program can be found on TABBS for downloading and will be included in the August issue of P8 Xtras.

HyperStudio™ Resource Guide

The following companies make products which are useful additions to the HyperStudio system:

Company	Product/Cost	Description
Digital Vision, Inc. 270 Bridge St. Deham, MA 02026 (617) 329-5400	ComputerEyes™ Video digitiser $249.95	Digitise images from your video camera, VCR, or laserdisc player.
Thunderware, Inc. 21 Orinda Way Orinda, CA 94553 (415) 2546581	**ThunderScan™** Scanner $219.95	Digitise images using an ImageWriter printer as a scanner. Good for digitising printed images like photographs, maps, etc.
Vitesse, Inc. 13909 Amar Rd. Suite 2A La Puente, CA 91746 (818) 813-1270	**Quickie** Hand Scanner $299	Great for scanning clip-art, photos from books, etc. Similar to ThunderScan, but is hand-held, rather than mounted in the printer.
B.E.A. Enterprises 100 E. Sierra, Ste 3115 Fresno, CA 93710 (209) 227-1721	**Clip-Art** "Things You See Everyday" "Life Sciences - Vol.I" "Graphic Images, Vol. 1" $39-$59	Black & White clip-art, 1000's of images in each package.
EdmarkCorp. 14350 NE 21st St. P.O. Box 3903 Bellevue, WA 98009 (800) 426-0856 (800) 422-3118 (In WA)	**TouchWindow™** $250	Touch-sensitive monitor screen. HyperStudio can use this as an alternative to the mouse for user input. Very good for young children, or anyone new to the computer. Even if you're used to the mouse, the TouchWindow is a very nice way of using HyperStudio stacks.
Pioneer Communications 3545 Long Beach Blvd. Suite 400 Long Beach, CA 90807 (213) 492-9935	**Laserdisc player** Models 2200, 4200, 8000. $895, $1095, $2285	HyperStudio compatible laserdisc players.
AIMS Media 6901 Woodley Ave. Van Nuys, CA 91406 (800) 367-2467	**Laserdisc titles**	100's of laserdisc educational titles.
Optical Data Corp. 30 Technology Drive Box 4919 Warren, NJ 07060 (800) 5242481 (201) 668-0022	**Laserdisc titles** "Windows on Earth Science" "Windows on Physical Science" "Windows on Life Science" (and many others!) **"Voyager Gallery"** "Shuttle Downlink"	Publisher of many laserdisc titles.
VideoDiscovery, Inc. 1515 Dexter Ave. N. Suite 400 Seattle,WA 98109 (206) 285-5400	**"BioScience I/II"** "Life Cycles" "Cell Biology" "DeathTrap" "Pollination Biology" "Encyclopedia of Landscape Plants" "Physics of Sports"	Publishers of many laserdisc titles.
ABC Interactive distributed by Optical Data	**"The '88 Vote"**	Interactive video disc of the 1988 Presidential campaign.
Voyager Co. 1351 Pacific Coast Hwy. Santa Monica, CA 90401 (213) 451-1383	"Regard for the Planet" "National Gallery of Art" **"Computer Dreams,"**	Publishers of many laserdisc titles.

ZTek Co. P.O. Box 1055 Louisville, KY 40201-1055 (800) 247-1603	Videodiscs, misc.	Directory of many lOO's of laserdisc and CDROM titles.
MECC, Etc. 2490 Lexington Ave. North St. Paul, MN 55126 (800) 228-3504 ext 527 (800) 481-3500 ext 527 in MN	**Videodisc, misc.**	Catalog of varied products, including laserdiscs, players, computer hardware, printer cards, software, etc.
TheLaserBeam Starship Audio Industries 605 Utterback Store Rd. Great Falls, VA 22066 (703) 430-8692	**Videodiscs,misc.**	Catalog of laserdisc titles. Mostly popular movies, but also equipment, and some educational titles.
Emerging Technology Consultants P.O. Box 12444 St.Paul, MN 55112 (612) 639-3973	**"Videodisc Compendium"** $15	Directory of over 700 laserdisc titles.
Magno Sound & Video 729 7th Ave. New York, NY 10019 (212) 302-2505	**Laser disc mastering** $300 for a single disk. less $$ in qty. Indexing extra.	This company will convert a standard VHS video tape into a laser disc with a very quick turn-around time. Additional video services also available.
Editdroid 3000 W. Olympic Blvd., Suite 1550 Santa Monica, CA 90404 (213) 315-880 (213) 315-4881 (fax)	**Laser disc mastering**	This company will convert a standard VHS video tape into a laser disc with a very quick turn-around time. $200-$300 (10 days vs. 48 hrs).
HyperLearning Network Box 103 Blawenburg, NJ 08540 (609) 466-3196	**"HyperLearning Forum"** $29/yr (4 issues) (18 mos/6 issues offer through 6/1/90)	Organisation promoting the uses of hypermedia in education. Quarterly newsletter. Free sample of newsletter available on request.
A2 Central P.O. Box 11250 Overland Pa.~, KS (913) 469-6502	**"Stack Central"** $42/yr 66207(6 2-disk issues)	Bi-monthly 2-disk magazine-on-a-disk. Includes articles, tips, sample stacks, L clip-art, sound effect, etc. Free sample disk available on request.
Teaching Technologies P.O. Box 3808 San Luis Obispo, CA 93403 (805) 541-3100	Laser disc players **Laserdisc~GS cable** $25 "Multimedia Guide"	Non-profit organisation promoting interactive video and offering a variety of hardware items, training workshops, consulting, and and other services. Helpful information on interactive video.
Radio Shack Stores	**RF Modulator** $30 #15-1273A	Converts monitor video output from GS RCA jack to signal that can be displayed on Channel 3 or 4 of a TV
	Stereo Mixer $60 #32-1 lOOA	**Mixes** sound output from Apple IIGS with sound from laserdisc player, lapel mike, tape players and other sources for final output to another tape player, the GS digitiser, or a PA system in a presentation.
	Speakers $79.95 #40-1262	Amplified Speakers that can be used with the GS for presentations. AC powered, 6 watts. (a better set is available from A2 Central, but these may fill a need in an emergency?
	Audio Cables $5.69 #420-2309	Set of four 3-ft cables, colour code~ May be use to connect GS to laserdisc player, or nearby VCR, monitor, etc. Longer cables may be purchased for greater distances as long as they have the same phone connectors at each end (part # 42-2368 is 12' cable).
	Phono Coupler 2 for $1.39 #2741553	Simple connector to link one or more shorter audio/video cables together.

Epson America 2780 Lomita Blvd. Torrance, CA 90505 (800) 922-8911	**Crystal Image Projector** $3449	Excellent GS-compatible RGB/NTSC video projection system. Small unit is very portable (13 lbs, 16" x 4.3" x 9.6").
Quality Computers 15102 Charlevoix Grosse Pointe Park, MI (800) 443-6697 (313) 331-0700	**RAM upgrades** reg. $39/256K $32/256K for HS users !	Supplier of GS RAM chips to upgrade 512K machines, memory cards, etc.
Chinook Technologies 601 Main St., #635 Longmont, CO 80501 (303) 678-5544 (800) 999-7034	**External Hard Disk** $669/20Mb $82g/40Mb $1199/80Mb	A good supplier of external hard disks! These prices include the Apple SCSI card, which would otherwise run about $100.
Applied Engineering P.O. Box 5100 Carrollton, TX 75011 (214) 241-6060	**Hard disks, memory cards** (call for prices & product list).	Long-time supplier of Apple hardware.
ON THREE, Inc. 1802 Mitchell Rd. Lake Stevens, WA 98258 (206) 334-8001	**RAM Cards, misc.** ($120 for 1Mb)	RAM expansion cards, memory testing software, misc. software, etc.

On-line sources of stacks and clip-art.

Note that access to these requires a modem, and appropriate communication software. The modem should be 1200, or even better 2400 baud (a 2400 baud modem goes for about $130). Communicatins software should e so8mething well-supported like Gazelle,Point-to-Point (Beagle Bros., Inc.) or AppleWorks GS (Claris).

Quantum Computer Services
8619 Westwood Center Dr.
Vienna, VA 22182
(800) 227-6364 (USA)
America Online
On-line computer service with HyperStudio library of stacks & clip-art, technical support, message exchange with other HyperStudio and Apple IIGS users. Many other topics and services are available.
$6/mo. min, $5/hr after 6pm, $10/hr before 6pm
RWP Electronic mail address: RWagnerInc

To find the HyperStudio area:
After signing on, press Apple-K for "keyword". Enter "aed" (for Apple Education). This will take you to a menu for the education forum area In the menu that appears, select !'Direct Connect". You will see the entries "Roger Wagner Publishing, Inc." and "StudioWare" Choose Roger Wagner Publishing, Inc. to read the messages among HyperStudio users, tips on using the software, news of contests, and technical support and update issues. Choose StudioWare to see the library of public domain and shareware HyperStudio stacks and clip-art files (95% public domain on stacks, lO0% pd on clip-art). On America Online, RWP and the StudioWare libraries are "cross- inked" to several other forums, and the same files can be accessed from the Graphics (keyword: "agr"), Productivity ("apr", and Music and Sound Forums ("ams").

Note: America Online provides their own communications software, which is included in the subscription price, so no additional software is required

CompuServe/Forum
15/16 Lower Park Row
PO Box 676
Bristol BS99 1YN
(0272) 255111

RWP Electronic mail address: 71660,50
To find the HyperStudio area:
After signing on, enter the command "Go Appfun". This will take you to a message board of technical support questions, and dialog between HyperStudio users. Typing "LIB 11" will select the HyperStudio stack and clip-art library, and then typing BROWSE will show a description of each file, and give you the option of downloading it. Typing HELP will get you more details on how to use the library.

COMPUTER DOWN!

EXAMPLES
ALL INCLUSIVE PRICES

APPLE][+ , //e, //c Power Supply £35
APPLE][+ , //e, //c Motherboard £35
Apple Interface Cards (most makes) £28
Disk Drive - repaired cleaned & aligned £28

Please ring for other repair prices or send equipment for free estimate
Quantity Discounts available

- FAST TURNROUND - NORMALLY 2 - 4 DAYS
- 3 MONTH WARRANTY
- TRADE ENQUIRIES WELCOME
- MOST MAKES OF COMPUTER, MONITOR, PRINTER e.g. IBM, TANDON, SINCLAIR, COMMODORE, OPUS, CLONES, EVEN PERSONAL COMPUTERS !

WE WILL NOT BE BEATEN ON PRICE • TRADE ENQUIRES WELCOME

COMTEC
UNIT G, SUNDERLAND HOUSE, SUNDERLAND STREET
MACCLESFIELD, CHESHIRE. SK11 6JF
TEL: (0625) 434691

The Nibbler Speaks

System 7.0

System 7.0 has been exposed sufficiently elsewhere in the magazine so I shall not mention it here other than to say from what I have seen its potential is truly amazing.

LC //e card

Those of you who came to the AGM or were at the Bidmuthin Open day recently will have seen the sneak preview we had of the //e card for the Mac LC. This card is now in stock at Bidmuthin priced at £110 + VAT. With the card fitted you can insert a 3.5 ProDOS disk into the drive and run AppleWorks or any other application designed for the //e. With an Apple 5.25 drive fitted into a small expansion socket you can use your standard 5.25 disks as well. It works seamlessly and brings the //e to the Mac. Mind you if they still sold the //e in the UK you could do the same thing and still be able to use your Mac for other things! The first thing you notice about the display is that the Mac generates crisp square pixels while the //e generates fuzzy round pixels. Characters on the Mac look chunky and jaggy in comparison to the rounding of the //e. Otherwise it is just a //e display ...

How's your power supply?

While at Bidmuthin I was impressed by the array of hardware and other items for the Apple II range. They are the only company wholeheartedly supporting the II from the hardware point of view. They are now virtually the sole supplier of IIgs in this country. We can only hope that Apple continue to make them available to them. While I was there I noticed on their shelves heavy duty replacement power supplies for the IIgs and //e. If you have been having any power problems give Huw or Mark a call and they will be able to sort you out.

Hams anonymous

A question I had recently brought up an idea. Would all those members who are also 'Radio Hams' like to submit their call signs and we shall add them to our growing list of Compuserve, AppleLink and Help line numbers in the magazine. I know there are a number of you out there and would like to keep in touch. Perhaps one of you would also like to host a 'Ham Sig'?

Eat your heart out Prestel

I bumped in to Philip Faber the other day. Phil is an old friend of Apple2000 who helped us with our Prestel database some years back. He is still into comms and Viewdata in a big way. He now runs a public access Viewdata service called 'SpeedLink'. SpeedLink offers over 40 conference areas covering most computers and topics but has an Apple and Macintosh specific conference area as well. Access to SpeedLink costs £30 per year. This actually works out cheaper than Prestel. If you would like to have a look and see what it can offer, call [illegible] at all speeds 2400 though 300 baud using ViewData emulation software (Data Highway, Antelope or Gazelle on the Apple II, Vicom or Pretzel on the Mac). Log in as GUEST and enter fourteen 2's as shown on screen. You can ask for an application form online if you wish. Where you are prompted for an 'introduction code' enter 'Apple2000'. This will ensure you get a special £5 discount for Apple2000 members!

Calling all programmers

Seven Hills Software are looking for IIgs specific applications to market. These can be either new or old pieces of software, all that is required is that the developer holds copyright to all the material within the package. Seven Hills currently market SuperConvert™, GraphicWriter III™, Font Factory GS™ and Disk Access™. These are packages that range from a Desk Accessory to a full blown graphic word processor.

Contact Earl Childers, 2310 Oxford Road, Tallahassee, Florida 32304, USA, or call 800-627-3836 or 904-575-0566 (Monday to Friday, 9-5 EST). You may also FAX 904-575-2015. These are all of course USA numbers. Alternatively contact Earl through AppleLink 'SEVENHILLS' or through Compuserve 72437,3165.

Laser Recharging again

I mentioned the Laser Recharge people last time. Alan Finn of ClockTower tells me of another company who are not just recharging but recycling as well. The difference this time is that the 'Blueprint' cartridges are actually remanufactured cartridges. You first of all buy a remanufactured cartridge from your Blueprint dealer and then return an empty cartridge for reprocessing at their expense. The empty cartridge is dismantled and entirely rebuilt using environmentally friendly parts to be offered on sale to the next customer. Alan can supply these if you would like to try them out. Prices will be around £60 + VAT per cartridge, call Alan for the latest details on 081-341-9023

SoftCat GS

Jon Gurr has finally got together his 'Update IIgs' software and hardware catalogue. If you are not on Jon's mailing list, write for a copy to MGA SoftCat, 41 Cinque Ports Street, Rye, East Sussex, TN31 7AD or phone 0797-226601 or Fax 0797-226721.

A cautionary tale

So your mouse is playing up. The button does not seem to work. Simple, you just open it up and take a look. Ah. The microswitch looks as though it needs a dab of the soldering iron to make the contacts secure. Unseen a tiny bit of solder bridges a gap. Back to the the Mac. Plug it in. Still it does not work. Try another Mac. That one gives no joy either. Pause for thought. Plug back good mouse to second Mac. This no longer works. Check with first Mac. It does not work either. Longer pause for thought. There are two Mac SE/30 motherboards that have blown up!

Quick call to handy Level 1 Service centre (aka Bidmuthin) to find that replacement motherboards for the SE/30 will cost £249 + VAT each and full price would set you back £950 or so. The mouse comes in at a cool £75 + VAT. These are the educational prices! A nice bill to pay when a sick mouse seemed easy to cure.

The moral. Do not mess with mice. They can be dangerous ani-

mals. If they go sick, consider them terminal and don't try and do your own privatised operation on them!

Hard Disk Blues

On the same subject of what not to do with your computer, I have another cautionary tale about connecting hard drives while the machine is switched on.

Hooking up a drive to my SCSI daisy chain the other day I was rewarded with a crashed cartridge and the main drive refusing to start. That nice little icon with the flashing question mark grinning at me no less!

The cartridge required Norton utilities to recover what I could from it, but the main drive at first refused to respond. Norton cleaned it up and mounted it. Next boot it still refused to show itself. In the end the handy floppy I keep with a minimal system allowed me to mount the drive and safely copy all my goodies from the system folder. I then put the entire system into the WasteBasket and reinstalled the system. Finally I copied back all the various Inits and was relieved to see the friendly welcome sign.

Switch off before you connect or disconnect anything seems to be the moral here.

Blinding you with Science

I received my FreeHand 3.0 upgrade the other day and settled down to install it. This should be a straightforward process using the standard Aldus Installer.

All went well till it asked which Postscript printer drivers I wanted. In previous versions it gave me a choice of LaserWriter, LaserWriter Plus and NTX etc. Now I see at least two LaserWriter Plus drivers and a host of other ones to boot. Which LaserWriter Plus driver do I use? I have my startup page disabled so cannot remember which version of Postscript the printer has. I suppose I shall have to turn the startup page on and see which one it thinks it is!

A check of the manual did not help me either. I am sure they could have included some more description for the less technical among us.

The cost of the upgrade is around £56. For that you get a complete new mammoth boxed set of manuals. Well done Aldus! You got that one right.

Disk Lore

Some time ago we published an article describing the difference between Double Density and High Density 3.5 disks. The suggestion was that you could simply drill a hole and use a standard Double Density in the new SuperDrives to get 1.4 mb.

I have been getting hold of cheap bulk disks costing around 40 pence each. Around one in twenty of these fail when turned into HD disks. This is not bad when you consider we have been getting a failure rate greater than this with a certain brand of disks used at normal Double Density. This brand shall be nameless but it does have a certain spirituous liquor connection to its name!

Finale

Lets hope it is not, but apart from Apple UK dropping support for the Apple II line, I hear on the grapevine that they are running short of IIgs colour monitors and that they may decide not to manufacture any more. The reason appears to be that they do not think it worthwhile to make any 240 volt versions for the European market. This seems odd to me as most of the world uses 220-240 volts. What about them? It appears that not enough are sold to make it all financially sensible. This of course must be put in the light of the fact that you cannot expect to sell a machine you do not admit exists!

SUMMER SOFTWARE CLEARANCE

SoftWare Codes:
5.25" 48K][+, //e, //c, IIGS [1]
5.25" 64K][+, //e, //c, IIGS [2]
5.25" 64K //e, //c, IIGS [3]
5.25" 128K //c, //c, IIGS [4]
5.25" 128K enhanced //e, //c, IIGS [5]
3.5" IIGS [6]

The Halley Mission [1] £7.99
A mission to rendezvous with the famous Halley's comet for astronomical observation - includes exciting mission papers with audio tape to make the game more realistic.

Oil Barons [1] £7.99
For budding JR Ewings... Great strategy board game which includes a real table-top board and playing pieces as well as the computer software.

Publish-It! Font Pack 1/2 [5] ea.£14.95
Ten additional fonts per pack.

People, Places & Things [4] £14.95
Exciting clip art for Publish-It! or TimeOut Paint/Graph/SuperFonts and other double hi-res packages.

Symbols & Slogans [4] £14.95
As above.

Education Graphics [4] £14.95
As above.

Art Library 1/2 [1] ea.£4.99
Print Shop graphics - about 75 per pack - great value.

Let's Make Combo [1] £24.99
Three disk set which will let you print letterheads, compliments slips, posters, signs, banners, calendars, greeting cards, and T-shirts, (T-shirt printing requires special heat-transfer ribbons from £7.95). Price is just £29.99 for the program combo plus both Art Libraries as above.

Instant Pascal [5] £39.95
ProDOS-based Pascal programming system from Apple.

Hands-on Basic Programming [1] £9.95
Teach yourself to program in Applesoft Basic with this CBT package, (Computer Based Training).

Arithmetic/Algebra [1] ea.£9.95
Educational software for early learning.

Fractions/Decimals [1] ea.£9.95
More educational software for beginners.

The Nibbler

A touch of AppleSoft Basic [2] £4.99
Book & disk from Apple to introduce you to programming in Basic.

Copy II Plus v8 [2] £14.95
Central Point's brilliant utility & disk copy system which copies most copy-protected software. Requires 64K and is the last version available which will run on a][+ or unenhanced //e. Get yours now before they're all gone. Includes 5.25" disk only.

AppleWorks v1 (Apple) [2/3] £69.95
Brand-new, reference manual + disks, - no tutorial manual. ADD £10 for][+ version.

AppleWorks v2 (Claris) [4] £79.95
Complete new package with tutorial, and fully TimeOut compatible. Includes mailmerge.

AppleWorks v3 (Claris) [4] £139.95
Brand-new, reference manual + disks, - no tutorial manual. Includes spell-checker.

AppleWorks v1 Reference Manual 2nd £14.95

AppleWorks v1 Tutorial Manual 2nd £9.95

MacPuter // [4] £89.95*
Complete accounting system for 128K //ecGS with twin 5.25" drives. Provides sales, purchases, and general ledgers; cashbook; management accounts; invoicing; cash flow; VAT returns, and backup. (Was £229.13). Educators wishing to use this as a tool to teach computerised accounting may purchase @ 50% discount.

MacPuter Pro [4] £129.95*
As MacPuter // but with the addition of stock control and invoicing from stock. Requires a Pascal-compatible hard disk or twin 3.5" drives. (Was £464.13). Educator's discount 50%.

Graphics ScrapBook II: Off the wall [1] £9.95
Over 100 wacko, zany, bonkers images in Print Shop format.

Sub Battle Simulator [2] £7.99
Undersea warfare 1939-45, US or German subs, two oceans, 60 missions.

Street Sports Basketball [4] £7.99

The Games: Winter Edition [4] £7.99

The Games: Summer Edition [4] £7.99

Space Shuttle [1] £7.99
Brilliant game with educational value based on a shuttle mission - designed after consultation with NASA.

MGA SoftCat AD TWO
Tel: 0797-226601 [fax: 226721]
prices include VAT
*-prices include p&p
& where two prices shown, the lower price is for Apple 2000 members ONLY
Access/Visa accepted
sensible software since '79

Britain's oldest Macintosh mail order company MacLine

MacLine

FAX 081 642 4621

081 643 4626

WREN HOUSE • SUTTON COURT ROAD • SUTTON • SURREY • SM1 4TL • VAT No 452 3149 66

Ⓥ signifies System 7.0 compatibility no symbol means unknown at press time.

WORD PROCESSING

WP APPLICATIONS

MacWrite II Ⓥ (powerful yet straightforward WP)	£155.00
Microsoft Word 4 Ⓥ (feature and function laden WP)	£189.00
Nisus 3.0 Ⓥ (hot WP with graphics, GREPS, macro language)	£220.00
Taste (new low cost entrant to a crowded WP market)	£95.00
Vantage (full featured DA especially good at converting DB files)	£57.00
WordPerfect 2.0 Ⓥ (Mac version of famous PC WP)	£199.00
Write Now 2.2 Ⓥ (fast straightforward WP, a doddle to use)	£115.00

WP UTILITIES & AIDS

Acta Advantage Ⓥ (stand alone and DA outliner)	£95.00
End Note (bibliography database essential for factual writing)	£95.00
Expressionist 2 (create accurate equations from this DA)	£85.00
Grammatik 2.0 Ⓥ (comprehensive detailed grammar checker)	£79.00
Inside Information (brainstorming tool associates words/ideas)	£79.00
Thunder 7 Ⓥ (competent spelling checker even works in Quark)	£65.00
Wordfinder (DA Thesaurus for any application)	£39.00

DATABASES

RELATIONAL

4th Dimension Ⓥ (heavyweight of the databases)	£495.00
Double Helix II Ⓥ (easier DB for starter programmers)	£350.00
FileForce Ⓥ (much easier to use and upgradeable to 4D)	£175.00
Foxbase+Mac 2 Ⓥ (fast DB with great interface reads dBase)	£345.00
Omnis 5 Ⓥ (now much faster and more Mac-like interface)	£495.00

FLAT

DAtabase Ⓥ (flat file DA for quick convenient access to data)	£75.00
FileMaker Pro Ⓥ (best flat file DB ever - everyone needs it)	£195.00
Panorama (flat file DB, very powerful and very quick)	£195.00

DEDICATED

C.A.T. 3.0 Ⓥ (salesman's dream, contacts activities time)	£325.00
DynoDex Ⓥ (remarkable shell for managing printing contacts)	£89.00
QuickDex Ⓥ (if you don't have it you aren't living - DA rolodex)	£35.00

BUSINESS

SPREADSHEETS

Microsoft Excel 3.0 Ⓥ (leading spreadsheet, new features)	£245.00
One Shot Worksheet Ⓥ (if you don't need all that power)	£59.00
WingZ Ⓥ (amazing spreadsheet includes charting and script)	£245.00

SPREADSHEET BASED SOLUTIONS

Power Macros for Excel (shows off Excel's macro language)	£49.00
Business Plan Toolkit (Excel budgeting and forecasting)	£69.00
Sales & Marketing Toolkit (comprehensive forecasting)	£110.00

BUSINESS GRAPHS & CHARTS

Cricket Graph (original colour graphing tool for the Mac)	£110.00
DeltaGraph Ⓥ (powerful flexible graphing tool)	£105.00
KaleidaGraph (highly rated US graphing package)	£149.00

SIMULATORS

Extend (powerful simulator with inbuilt language)	£320.00
iThink (powerful straightforward simulator from Stella folk)	£325.00

INTEGRATED SOFTWARE

Desk (WP DB Spreadsheet Comms Paint Draw Secretary)	£195.00
Microsoft Works 2 Ⓥ (WP, DB, Comms, Draw, Spreadsheet)	£125.00
Microsoft Office Ⓥ (Excel, Word, PowerPoint, File, bundle)	£425.00
Microsoft Office CD ROM Ⓥ (as above)	£495.00

PROJECT MANAGEMENT

KeyPlan (develop in outliner then zap you are in critical path)	£235.00
MacProject II Ⓥ (powerful yet straightforward and flexible)	£315.00
MacSchedule 2.5 (less heavyweight project scheduling)	£115.00

ACCOUNTING

MacMoney 3 UK Ⓥ (unbeatable home accounts and small biz)	£75.00
Ritz (powerfull and comprehansive accts for smaller business)	£340.00
Path (best complete accounts package for the non accs literate)	£345.00

PRESENTATION

Cricket Presents (established presentation software)	£275.00
More III Ⓥ (extensive outliner/text/presentation capability)	£295.00
Persuasion 2.0 Ⓥ (high end presentations with outliner)	£365.00
PowerPoint Ⓥ (powerful intuitive easy presentations)	£189.00

£35.00

SIMM	1Mb SIMMs	£35.00
SM2B	2Mb SIMMs	£99.00
SM4MB	4Mb SIMMs	£155.00
SMFX	1Mb Mac IIFX	£39.00
SM4FX	4Mb Mac IIFX	£155.00
SMFX	LaserWriter II	£39.00
PORT1	1Mb Portable	£199.00
PORT2	2Mb Portable	£399.00
PORT3	3Mb Portable	£525.00

MEMORY

GRAPHICS

PAINT & DRAW

Canvas 2 Ⓥ (high end draw/paint package very good at layers)	£195.00
Desk Paint 3.0 Ⓥ (very good DA paint and draw package)	£125.00
MacDraw II Ⓥ (easy to use yet powerful draw package)	£275.00
MacPaint II Ⓥ (the original Mac launches)	£89.00
MacCheese Ⓥ (super cheap 32 bit colour paint tool)	£69.00
Mariah Ⓥ (database for your graphics, search, keywords)	£99.00
Oasis Ⓥ (marvellous new 24 bit colour mimics oils etc)	£595.00
Pixel Paint Professional Ⓥ (32 bit, the rest as above)	£375.00
SuperPaint Ⓥ (classic paint and draw software)	£130.00
Studio 1 Ⓥ (unique animating paint package)	£75.00
Studio 8 Ⓥ (full featured high end colour paint program)	£225.00
Shirlio 32 Ⓥ (32 bit version of the above, 5 mice MacUser)	£415.00
UltraPaint Ⓥ (knockout colour paint and draw program)	£140.00

DARKROOM & RETOUCHING

ColourStudio Ⓥ (powerful retouching with good paint tools)	£795.00
Digital Darkroom Ⓥ (monochrome photo retouching)	£250.00
Image Studio Ⓥ (monochrome photo retouching)	£240.00
PhotoShop Ⓥ (current king of the photo retouching packages)	£695.00
Shapes Ⓥ (great special effects for ColorStudio)	£235.00

CAD & MODELLING

Claris CAD 2.0 Ⓥ (straightforward powerful CAD)	£495.00
Generic CADD (popular US CAD package)	£325.00
MacRenderman (the best rendering tool for 3D images)	£545.00
MiniCad (mad CAD performance)	£430.00
Model Shop (3D solid object modelling tool)	£355.00
Ray Dream Designer (3D modelling & rendering)	£595.00
Realise (new 3D solid object modelling tool)	£425.00
StrataVision 3D Ⓥ (24 bit photo realistic rendering)	£295.00
Swivel 3D Pro Ⓥ (now supports 24 bit colour)	£355.00
Super 3D ver. 2 (flexible colour 3D tool)	£325.00
Virtus Walkthrough (draw in 3D and fly through the model)	£695.00

POSTSCRIPT GRAPHICS

Freehand 3.0 Ⓥ (PostScript drawing with text manipulation)	£315.00
Illustrator 3.0 Ⓥ (power PostScript text and layout ability)	£375.00
Streamline Ⓥ (best PostScript auto tracing tool)	£145.00

DESKTOP PUBLISHING

DTP APPLICATIONS

DesignStudio Ⓥ (high end DTP program)	£495.00
FrameMaker Ⓥ (pro publishing also on UNIX and NEXT)	£750.00
Multi Ad Creator (specialised DTP for laying out adverts)	£675.00
PageMaker 4.0 Ⓥ (one of the two heavy hitters)	£495.00
Personal Press (new baby brother for PageMaker)	£195.00
Publish It Easy 2.0 Ⓥ (MacUser US best DTP winner)	£145.00
Quark Xpress 3.0 Ⓥ (the other of the two heavy hitters)	£495.00
Quark Xtras Ⓥ (goodies that add to Xpress' features)	£69.00
Ventura Publisher Ⓥ (finally migrates from DOS world)	£575.00

DTP AIDS & FONT MANIPULATION

The Curator (collates/displays images/graphics on hard disk)	£90.00
DataShaper (database publishing tool)	£225.00
LetraStudio (powerful headline font manipulation software)	£385.00
Pre Print Ⓥ (colour separates your PageMaker output)	£365.00
SuperGlue 2 (transfer, view and paste incompatible documents)	£85.00
TypeStyler Ⓥ (manipulates PostScript fonts)	£155.00
TypeAlign Ⓥ (draw a wiggly line and type text, needs ATM)	£79.00

FONTS

TYPEFACES (all ≤)

Adobe Fonts	call
ATM Plus Pack (Adobe versions of rest of the Laser fonts)	£130.00
Adobe Type Manager (THE essential DTP program)	£59.00
Adobe Type Sets (collections of Headline fonts)	from £79.00
Fraction Fonts (a Serif and San Serif font for any fraction)	£45.00
Fluent Fonts (collection of bit mapped fonts)	£35.00
Fluent Laser Fonts (79 excellent PS fonts)	£130.00
Monotype Fonts (much of the famous library is now on the Mac)	call
Network Font (design your own Networks with Netfonts)	£75.00
World Class Fonts (great bitmap collections)	each £49.00

"The Originals", "The Stylish", "The Giants" and "The Triples" great for non PostScript printers.

FONT FOUNDRIES & UTILITIES

Adobe Type Reunion (if you use lots of fonts you need it)	£45.00
Art Importer Ⓥ (turn your PostScript art into a PostScript font)	£95.00
FontStudio (fab bit mapped font foundry from Letraset)	£450.00
Fontastic Plus 2 (classic bit map font foundry)	£55.00
Fontographer 3 Ⓥ (most popular PostScript font creator)	£295.00
MacKern (kern your sets of fonts)	£69.00
Metamorphosis Pro Ⓥ (converts Type 1 & 3 to TrueType)	£95.00

MULTIMEDIA

HARDWARE

Moonraker (highly rated special effects board)	£1695.00
Computer Eyes (colour video capture with some FX)	£225.00
NuVista+ (4Mb broadcast quality video board)	£2995.00
Neotech Image Grabber (manipulate video images)	£1150.00
VideoLogic DVA4000 Kit (new multimedia card & software)	£1895.00

SOFTWARE

Animation Works (great value animation package)	£115.00
FilmMaker (high end multimedia animation package)	£695.00
MacroMind Director Ⓥ (key multimedia tool)	£535.00
MediaMaker Ⓥ (edit it all into a story for recording onto video)	£475.00
MediaTracks Ⓥ (record, edit and playback screen sequences)	£170.00

CLIP ART

Publishers Resource Ⓥ (TGIMB set of UK origin PostScript art)	£99.00
Designers Resource Ⓥ (dozens of beautiful EPS backgrounds)	£75.00
MapArt EPSF Ⓥ (world maps in PostScript format)	£95.00
MapArt Paint Ⓥ (world maps in MacPaint format)	£45.00
PostScript Maps UK Ⓥ (counties roads towns, London postal)	£95.00
PostScript Maps Europe Ⓥ (cities rivers countries)	£95.00
Spectrum CD Rom Ⓥ (huge quantity of good images)	£199.00
WetPaint Ⓥ (best bitmap art available – 1000's of images) (nine different sets of three disks each)	each £49.00

PC COMPATIBILITY

Access PC Ⓥ (read PC files direct from floppy)	£79.00
DOS Mounter Ⓥ (same as above)	£69.00
DOS ReaDA (DA that allows Mac to read and write to PC disks)	£29.00
MacLink Plus (popular Mac/PC link with100's translators)	£135.00
Soft PC Mac OS Ⓥ (IBM286 EGA emulation for big Macs)	£250.00
Soft PC 286 with EGA (add on to Soft PC above)	£135.00
Tops Flashcard (LocalTalk card for PC works with Tops DOS)	£110.00
Tops DOS 3.0 (PC version of Tops for Apple networks)	£125.00

COMMUNICATIONS

COMMS SOFTWARE

MicroPhone 3.0 Ⓥ (acclaimed comms pack with user icons)	£210.00
Vicom Connect (famous UK package easy to use yet powerful)	£140.00
Vicom Multiterm (a bigger brother)	£225.00
White Knight Ⓥ (very powerful. RedRyder upgrade)	£99.00

COMMS HARDWARE

TelePrint Fax Modem Ⓥ (a great product at a great price)	£195.00
NetModem (share one modem over entire network)	from £335.00
NetSerial (share serial devices on network)	£250.00
NetBridge (bridge networks for extra speed etc)	£365.00
WS3000 Modem (old faithful 1200 BAUD modem)	£199.00
WS3000 V22 BIS (old faithful 2400 BAUD modem)	£295.00
Courier HST 9600 baud (fast modem at good price)	£595.00

NETWORK SOFTWARE

Carbon Copy Twin Pack Ⓥ (remote access and file sharing)	£220.00
DataClub (new pretender to Tops crown starts as 3 pack)	from £169.00
EtherPeek (monitor Ethernet networks)	£525.00
EasyShare Ⓥ (cheap but sophisticated file sharing)	£99.00
GraceLAN (lousy name, good network analysis)	£195.00
Liaison (print router and network dial in)	£245.00
LocalPeek (monitor LocalTalk networks)	£285.00
Microsoft Mail Server Ⓥ (classic powerful E-Mail)	£185.00
Microsoft Mail 10 User Ⓥ (works with above)	£395.00
QuickMail 2.2 10 User Ⓥ (powerful flexible E-Mail)	£325.00
Timbuktu 4.0 Ⓥ (remote access software for networks)	£85.00
Timbuktu Remote Ⓥ (remote access software for modems)	£115.00
TOPS 3.0 (classic file sharing software without dedicated Mac)	£145.00

HARDWARE

INPUT DEVICES

Floppy Drive 800K (add-on external floppy)	£135.00
Floppy Drive 1.44Mb (add-on external floppy)	£235.00
Gravis MouseStick ADB (serious stick for serious gamesmen)	£95.00
Extended Keyboard (15 function keys, numeric pad)	£105.00
Kurta Graphics Tablet	from £295.00
Wacom Graphics Tablet (pressure sensitive)	from £550.00
MacRecorder II Ⓥ (classic cult sound digitiser with software)	£150.00
Voice Digitiser (as above without sound edit software)	£95.00
Voice Navigator II (most sophisticated voice recognition yet)	£495.00

MAC TO TAKE AWAY

Agenda 32K (pocket size free form database)	£155.00
Outbound (turn your Plus or SE into a portable)	from £1495.00
Z88 MacLite (classic in its time great Mac link WP spread)	£295.00

CHIPS 'n' BOARDS

SIMMs	see box
Accelerator Boards and Cache Cards	call
DoubleUp (NuBus board and compression software)	£155.00
Impression (software only compression from Radius)	£125.00
Radius Rocket (faster than an FX, 25Mhz 040 accelerator)	£1995.00
Ethernet Boards (thick thin wire or twisted pair versions)	from £295.00

ACCESSORIES

Cables	call
Ariel (AppleTalk)	£25.00
MacNet (PhoneNet)	£19.00
Diskette storage box 80	£9.00
Mouse Mat	£4.00
Anti Glare Screens	from £35.00
Security Cable System	£35.00
Mac II Stand (vertical)	£65.00
SE/Plus/Classic Tilt & Swivel stand	£24.00
Mac Carry Bag	£59.00
Toolkit	£15.00

CONSUMABLES

DD 800k Floppy Disks	£0.75
HD 1.44Mb Floppy Disks	£1.25
ImageWriter Ribbons	£3.75
Laser Labels (floppy disk or envelope)	£12.00

MacLine Britain's oldest Macintosh mail order company

MacLine Policy

- Credit cards will not be charged until the order is shipped.
- If a partial order is despatched, the balance is posted free of additional postage charges.
- All goods are sent by Recorded First Class Mail or by a courier service. A signature is required on delivery.
- Same day delivery in London area is available at extra cost.
- Defective software is replaced immediately.
- Refunds will only be given on unopened packages that are returned within 7 days of receipt.
- Prices are correct at time of going to press.

ALL PRICES ARE EXCLUSIVE OF VAT & POSTAGE

CALL FOR OUR FREE CATALOGUE

Access VISA

Authorised Apple Dealer

Ordering & Payment

- To order call Monday - Friday, 9.00 am to 6.00 pm.
- DELIVERY: Add £2.50 on orders up to £150.00 in value. Add £6.00 on orders between £150.00 & £750.00 in value. Add £12.00 on orders above £750.00 in value.
- Add VAT to the total price, except on books.
- Payment is by credit card, cheque or money order.
- Government depts, Ed establishments and Plc companies are welcome to purchase with an official order subject to status.
- International orders accepted with credit card only. Postage added at cost.

Paper Mono Laser 100g (very high quality)	£10.00
Paper Mono Ink Jet 90g (very high quality)	£6.00
Toner Cartridges (laser & inkjet printers)	call

PRINTERS

Epson Serial card (for Epsons that don't have a serial port)	£25.00
LabelWriter (mono thermal printer produces sticky labels)	£195.00
LaserMax KX1000 (1000 dpi A4 mono printer)	£5995.00
GCC PLP II (great laser printer at a great price)	£695.00
GCC PLP IIS (8 page per minute version)	£995.00
HP DeskWriter (superb inkjet, new low price/Appletalk)	£395.00
HP PaintWriter (cheapest way to print in colour 150 DPI)	£650.00
LabelWriter (mini thermal printer produces sticky labels)	£195.00
Tektronix ColorQuick (best value thermal technology)	£1995.00

PRINTER SOFTWARE

Epson LQ Mac (driver and fonts for serial Epson LQ printers)	£69.00
Freedom of the Press (PS interpreter for many printers)	£245.00
Freedom of the Press Light (cut down version)	£65.00
TScript (software PostScript interpreter for non PS printers)	£115.00

DATA STORAGE

20 Mb external drive (Micronet)	£235.00
42 Mb external drive (Micronet)	£325.00
100 Mb external drive (Micronet)	£425.00
210 Mb external drive (Micronet)	£695.00
400 Mb external drive (Qisk)	£1195.00
600 Mb external drive 5 ¼ (Qisk)	£1695.00
Tape Backup 150 Mb (Disk)	£595.00
Optical Drive 600 Mb (Disk)	£2495.00
CD ROM Drive (Toshiba)	£450.00
45 Mb Syquest Removable Drive (Micronet)	£450.00
80 Mb Syquest Removable Drive (Micronet)	£995.00
Syquest Removable Cartridge	£55.00
WORM 940 Mb (Panasonic)	£2350.00

SCANNING

Agfa Focus II 800GS (best colour A4 scanner)	£3895.00
Microtek 300ZS (great quality low cost colour)	£1550.00
OmniPage ® (best OCR currently in existence needs 4Mb)	£540.00
OmniDraft ® (add on to above for dot matrix OCR)	£75.00
OmniSpell ® (spelling checker for OmniPage)	£75.00
Ricoh RS322 (256 Grey Scale with software)	£895.00
Read-It 2.0 (first OCR package sold widely)	£295.00
Read-It Personal (budget OCR for handhelds)	£155.00
ScanMan (biggest selling handheld scanner)	£295.00
Scan X Pro (scans up to to 1500 DPI/256 greys)	£1295.00
Sharp JX 300 (superb quality A4 colour scanner)	£2390.00
Typist ® (handheld with best built in OCR needs 4Mb)	£445.00

PROGRAMMING

ProGraph (new programming tool)	£245.00
Prototyper II (creates C code for Windows Menus Dialogs)	£195.00
QuickBasic (a little BASIC zinger from Microsoft)	£59.00
SmallTalk V (best version of the definitive OOPS language)	£139.00
Think C 4.0 ® (PageMaker was written in this)	£135.00
Think Pascal 3.0 ® (it probably could be rewritten in this)	£135.00
TMON (debugger catches your Mac when your appl crashes)	£98.00
ZBasic 5 (heavyweight BASIC with good toolbox access)	£125.00

MUSIC

Concertware + (instrument maker composer and player)	£45.00
Concertware + MIDI (as above for MIDI)	£125.00
Practica Musica (teaches music theory and ear training)	£80.00
Super Studio Session (8 voice composer play very good)	£69.00
MIDI Interface	£57.00

CHILDRENS

Cosmic Osmo (magical interactive audiovisual adventure)	£47.00
Cosmic Osmo CD (as above only bigger on the CD)	£55.00
FarthQuest (heralds a new type of multi curricular learning)	£55.00
KidsTime (5 classic learning programs for the 3 to 7 year old)	£35.00
KidsMath (takes kids from counting to applied arithmetic)	£35.00
KidPix (wonderful paint prog with sounds)	£29.00
The Manhole (like Cosmic Osmo only different)	£35.00
The Manhole CD (as above only more of)	£45.00
Math Rabbit (teaches counting arithmetic to young ones good)	£39.00
NumberMaze (award winning arithmetic tutor)	£35.00
NumberMaze Decimals & Fractions (helps the older kids)	£35.00
Reader Rabbit (award winning program for teaching reading)	£39.00
Talking Tiles (animated face mouths letters and vowels)	£35.00
Where in World is Carmen San Diego? (geography based)	£35.00
Where in Europe is Carmen San Diego? (geography based)	£35.00
Where in Time is Carmen San Diego? (history based)	£35.00

EDUCATION

Special very low Education prices are available on some products, including Microsoft, Claris, Symantec and others to authorized educational establishments with Educational Purchase Orders.

Typing Instructor Encore (good training from basics to touch)	£25.00
MacTeach (specify Mac) (audio/disk training)	each £55.00
Professor Mac (new training - rise your Mac to learn y'ar Mac)	£29.00
Training for PageMaker 4.0 (Mac based application training)	£49.00
Training for Word 4.0 (Mac based application training)	£49.00
Beethoven 9th Symphony CD	£75.00
Bach's Brandenburg CD	£75.00
Grolier Encyclopaedia CD	£295.00
Countries of the World CD	£395.00
Guinness Book of Records CD	£140.00
Calculus	£65.00
Physics	£65.00
Voyager Astronomy	£95.00
Word Torture Language tutor: French, Spanish, German, Russian	each £35.00

UTILITIES & DA's

FILE & DISK MANAGEMENT

911 Utilities ≤ (the pro's file & disk recovery)	£99.00
Complete Undelete ≤ (recover trashed documents)	£39.00
Can Opener ≤ (view data files without parent application)	£75.00
ClickChange (interface customisation)	£49.00
Disk Express II ≤ (speed up, unfragment hard drives)	£59.00
DiskDoubler ≤ (the compaction to save space)	£49.00
Disk Top 4 ≤ (powerful DA finder)	£69.00
File Director (9 essential DA's and Finder enhancement)	£75.00
Golem (search key words in multiple text files)	£54.00
HandOff II (no more "application is busy or missing")	£59.00
InitPicker 2.0 ≤ (choose startup inits)	£35.00
MultiDisk ≤ (best hard disk partitioner)	£59.00
Norton Utilities (hard disk utils from the PC)	£65.00
Now Utilities (12 wonderful inits & DA's)	£69.00
On Cue (launch applications and documents from menu bar)	£39.00
On Location (lightning fast file locators)	£85.00
Personality (allows customisation of the Mac interface)	£55.00
Shortcut ≤ (extra commands to open dialogue box)	£49.00
SUM II (essential utilities plus guard against crashes)	£80.00

SECURITY

After Dark 2.0 ≤ (screen saver with many options)	£24.00
A.M.E. (very sophisticated data security)	£195.00
DiskLock ≤ (reasonably priced data file security)	£125.00
Empower I (file & data security)	£129.00
Empower II (sophisticated file & data security)	£225.00

UNMISSABLE PRICE OFFER

100Mb External Hard Drive

Amazing new low price for this high quality Micronet top of the range drive.

ONLY £425.00

MacSafe II (file security)	£95.00
FileGuard (data encryption)	£145.00
Nightwatch (hard disk security)	£75.00
Out of Ink (lock out prying eyes from your data)	£32.00

BACKUP & VIRUS PROTECTION

AutoSave ≤ (saves your work at user determined intervals)	£29.00
Backmatic ≤ (for those who hate backing up)	£55.00
DiskTwin (constant HD duplication security)	£595.00
FastBack ≤ (very fast and compact)	£105.00
NightShift (sophisticated network backup)	£525.00
Redux 2.0 ≤ (best backup program on the market)	£59.00
Retrospect ≤ (most sophisticated archival backup)	£130.00
Retrospect Remote ≤ (THE solution for network backup)	£225.00
SAM 2.0 ≤ (Symantec's anti virus utility)	£79.00
Virex 3.0 ≤ (best virus fraser & eradicator of all)	£59.00

PRODUCTIVITY ENHANCERS

Calculator Construction 2 (create DA calculators)	£54.00
Calendar Maker ≤ (customise calendars)	£39.00
CalendDA (brilliant alarm reminder and diary system)	£37.00
DiskPaper (print to disk from any application)	£95.00
DymoDex 2.0 ≤ (phone/address database with filofax printout)	£69.00
Exposure Pro ≤ (screen dump utility with paint tools)	£80.00
Hypie DA II (read HyperCard files from a DA)	£49.00
Mast ist (simple DA list manager)	£45.00
Master Juggler (100's DA's & fonts bypassing F/DA Mover)	£59.00
Meeting Maker 5 user ≤ (sophisticated network diary)	£145.00
MultiClip 2.0 (multiple copies & pastes)	£65.00
QuicKeys 2.0 ≤ (macro maker time saver utility)	£99.00
QuickDex (lightning fast DA database essential)	£35.00
Screenshot (low cost full featured screen dump utility)	£35.00
Stepping Out 2 ≤ (software big screen extender)	£59.00
Smart Alarm (DA reminder/diary system)	£65.00
Smart Alarm (multi user network diary version)	from £125.00
SmartScrap & Clipper (enhanced scrapbook)	£65.00
stopWatch 3.0 (client & project time/activity monitoring)	£85.00
Stuffit Deluxe ≤ (premier file compression program available)	£85.00
Suitcase 2 ≤ (manages 100's DA's & fonts)	£49.00
SuperGlue II (print images to disk)	£69.00
SuperSpool (best ImageWriter spooler)	£59.00
SuperLaserSpool (Laser & ImageWriter spooler)	£95.00
Talking Mouse (not a productivity enhancer)	£23.00
Tempo II (the most powerful macro maker)	£99.00
TouchBase (networkable contact database)	£95.00
windowWarrior (logs time usage of windows)	£75.00

ENTERTAINMENT

ARCADE

→Beyond Dark Castle (more of the classic game)	£27.00
✔Crystal Quest 2 (Britain's favourite game)	£29.00
✔Crystal Quest with Critter Editor (edit game to your taste)	£49.00
✔Colony (loosely based on the movie "Aliens")	£24.00
+Dark Castle (the classic Mac game still going strong)	£27.00
✔Faces (from the Tetris people)	£24.00
✔Hostage (anti terrorist rescue mission)	£29.00
✔Mission Starlight (addictive space shoot 'em up)	£29.00
✔OBUS (brilliant space arcade shoot 'em up)	£25.00
→PipeMania (arcade game from Lucas Films)	£24.00
→Shufflepuck (air table ice hockey)	£29.00
✔Sky Shadow (shoot 'em up from the Crystal Quest author)	£29.00
✔Tetris (award winning colour Soviet game)	£24.00
✔Wetlins (3 Dimensional Tetris, could drive you insane)	£24.00

SIMULATIONS

+4th and Inches (manage an American Football team)	£29.00
✔Chuck Yeager Flight Trainer (colour & different aircraft)	£25.00
✔Crazy Cars (exciting driving simulation)	£24.00
✔Hot Cycles (excellent motorcycle racing sim)	£27.00
+Flight Simulator (the famous Microsoft one)	£39.00
✔Falcon 2 (exciting & networkable flight simulator)	£34.00
✔Ferrari Grand Prix (the best formula one simulation)	£36.00
✔Fokker Triplane (World War One flight simulator)	£29.00
+Hunt For Red October (read the book, see the film ...)	£24.00
✔Jack Nicklaus Golf (highly rated simulation)	£32.00
✔Life and Death (be a doctor, perform actual operations!)	£24.00
✔MacGolf (superb graphics (Plus & 1Mb SE only!))	£35.00
✔MacGolf Colour (highly addictive (all other Macs))	£56.00
✔MacSki (get in shape for the slopes!)	£42.00
✔Mean 18 (alternative colour Golf simulation)	£27.00
✔Chuck Yeager Flight Trainer (colour & different aircraft)	£25.00
✔Net Trek (multi player network space game)	£39.00
→PT 109 (graphic patrol boat simulation)	£29.00
✔Sim City (design and run your own city)	£32.00
✔Sim City Colour (design and run a colour city!)	£52.00
✔Sim Earth (design and run your own planet)	£49.00
✔Space Rogue (equivalent of Elite only better)	£27.00
✔Strategic Conquest (top war simulation)	£39.00
✔The Duel:Test Drive (rank your Porche round California)	£32.00
✔Vette (race a Corvette through San Francisco)	£34.00

STRATEGY

+Ancient Art of War (Sun Tzu's high quality war simulation)	£29.00
+Ancient Art of War at Sea (seafaring version of above)	£29.00
+Balance of Power (use political strategy to keep the peace)	£24.00
→Balance of Power 1990 (sequel to the best seller)	£24.00
→Reliance of the Planet (save the environment and world)	£32.00
✔Darwins Dilemma (based on evolution)	£29.00
✔Guns & Butter (run your own country)	£27.00
+Patton vs Rommel (strategy war game)	£19.00
✔Tesserae (colour matching mind stretcher)	£29.00

ADVENTURES

✔Arthur (text based adventures of the round table)	£32.00
✔Citadel (fantasy adventure)	£29.00
+Deja Vu (hard boiled private detective adventure)	£24.00
✔Deja Vu II - Lost in Las Vegas (the sequel)	£24.00
✔Manhunter New York (excellent graphic adventure)	£35.00
✔Manhunter San Francisco (the adventure continues)	£35.00
+Trust & Betrayal (intuition, ethics not bullets)	£24.00

BOARD GAMES

✔Bridge (from novice to advanced playing levels)	£29.00
✔Chess Champion (best Chess game)	£25.00
✔Go Junior (award winning version of famous game)	£21.00
✔Ishido (award winning oriental Go/Mah Johng style)	£32.00
✔Solitaire Colour (with beautiful graphics)	£24.00
✔Shanghai (Mah Jonghish game with stunning colour)	£21.00
✔Stratopo (award winning classic war game)	£27.00

KEY Works on -

+ Plus & SE only → Plus, SE, II ✔ Plus, SE, II, CX and SE30

Many games do not work on the CI, FX, Classic, SI, LC and Portable.

ONLY MACLINE PROMISES NO GREY IMPORTS AT ALL...

CIM

Ewen Wannop shows us how easy comms can be using the Compuserve Information Manager

The humble telephone line connects us to many host systems around the world. Virtually all these systems send us their output in the form of scrolling text. This has the real advantage that we can use almost any computer and almost any communications (comms) package to access such host systems. All that is needed is a text display of at least 40 characters wide. The Macintosh is not the ideal machine to use for such work, I find an Apple //e is faster and easier to use for such basic comms work. For those of you who already use a modem, you will know that calling up a Bulletin Board or host system can be tedious, time consuming and just downright frustrating, even when you call the friendliest of systems. This has often put off all but the most steadfast users from accessing the exciting world of comms.

At Apple2000 we have long promoted the use of comms both through our own Bulletin Board TABBS, and recently through the world's largest host system Compuserve. Compuserve has a vast store of information and has an especially comprehensive area devoted to the Macintosh. However Compuserve also sends us the yards of scrolling text if we log in with a standard comms package like Red Ryder or Microphone. When you first log in to Compuserve it will present you with a bland menu which really gives no clue as to the vast and enormous fund of knowledge and interest awaiting your exploration. All that is changed if you get hold of a copy of Compuserve Information Manager or CIM for short.

Alternative Emulations

It was not long before alternatives to the basic scrolling text screen were tried. Our very own Prestel, which is only an implementation of the European Viewdata display, uses a custom screen display. But it was not until Apple created its own private Bulletin Board, AppleLink, that custom software utilising the full power of the Mac was really seen. Compuserve have taken this idea many stages further and with CIM have produced the easiest and most powerful comms software I have ever seen on any computer. Even a novice can hardly fail to be excited by comms when they use CIM! There are none of the usual menus filled with incomprehensible commands. Everything is clear and logical in the true Macintosh spirit.

Figure 4

But that is not all. CIM is probably the best value for money of any comms package you can buy. At £12.50 plus £3 for P&P it is an absolute steal. You receive a fully boxed, 300 page ring bound manual for Compuserve written round CIM. Those who access Compuserve using other comms programs will pay the same price for the plain Compuserve manual alone. The CIM software is really given away free with the manual. There is a catch of course, and that is that you will find accessing Compuserve such a joy, you will spend hours and hours online as a result. Compuserve will win out in the end...

What Is CIM?

CIM is dedicated comms software to access Compuserve. It is not really suitable for any other host system though you can use its terminal mode as a dumb terminal to access TABBS or other Bulletin Boards. CIM is a full desktop application which easily and quickly navigates you around the vast Compuserve system. It also supports the ultra fast B+ download protocol and supports the majority

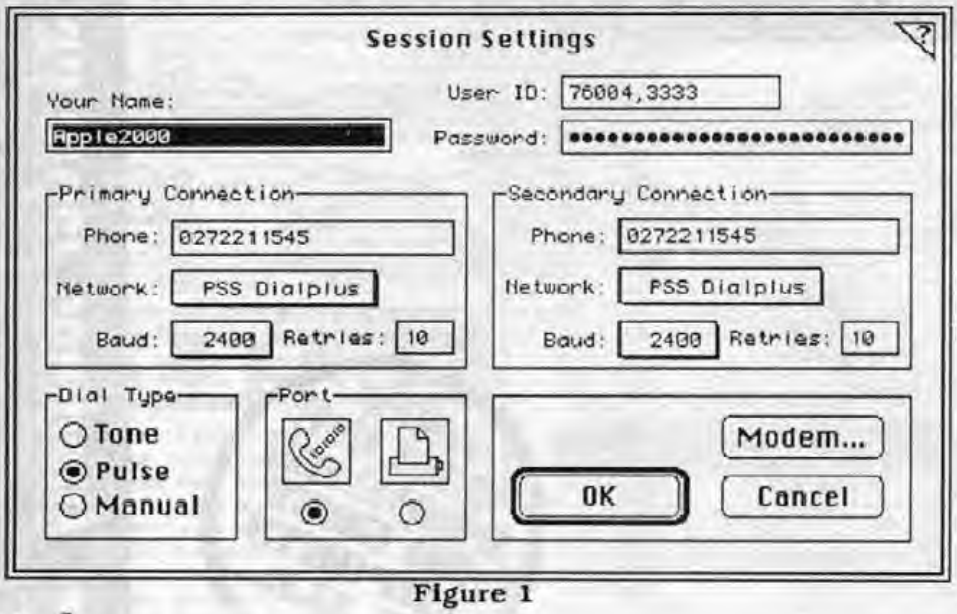


Figure 1

of forums and services on Compuserve. Those that are not as yet supported by CIM will display in the scrolling text terminal window. You return automatically to the desktop environment when you leave any of these services.

What Will I Need?

You will need a copy of CIM. If you already have a Compuserve ID simply call up Compuserve/Forum in Bristol and order a copy of CIM. If you have not yet joined Compuserve, call up Compuserve/Forum and tell them you are an Apple2000 member. You will need to give them your Apple2000 membership number and ask for the special deal that Apple2000 has arranged with them. Order a copy of CIM at the same time as you join.

You will also need a modem and interface cable to your Mac. If you do not already have these items Apple2000 can supply you with them. Call Irene on 051-928-4142 for further details. We would recommend a modem with at least V22 (1200 baud) speed. V22bis (2400 baud) is even better. 300 baud is really just too slow for sensible comms these days.

You will also need a telephone line.

What Do I Do Next?

The CIM package contains the software and the Compuserve manual. It even includes a list of DialPlus access telephone numbers and a separate software Installation Guide. With your modem connected you are complete and ready to go.

You can run CIM from a copy on floppy disk or you can drag the whole folder over to your hard disk. When you run CIM for the first time, or if you delete the file CIM PREFS from your system folder, you will be taken directly to the Session Settings menu option (Figure 1). This is a one time operation and allows you to configure CIM for the access point you will be using and also configures with your Compuserve ID and password. Although this password is never again displayed on screen, anyone taking a copy of the CIM PREFS file can use your account. Be careful with it! Once you have configured CIM you will not need to do this again. From now on comms could not be easier...

Figure 2

Now I Have Installed CIM...

The initial CIM desktop is shown in Figure 2. To get online to Compuserve from here all you need do is to make sure you have your modem connected and switched on click on which ever item interests you.

Here is where CIM will show you its real power. CIM will detect that you are not already online and will automatically connect you by dialling the network and logging you into Compuserve. Once connected to Compuserve you will be taken directly to the menu or other item you have selected.

Moving around Compuserve is now simply a matter of clicking on the screen item or selecting from the Favourite Places window. It is really so simple to use that the only clue you will have that you are actually talking to a host system many thousands of miles away is the short delay while items or forums are opened.

Disconnecting from Compuserve is just as easy. From anywhere you might be on Compuserve, just select Disconnect from the File menu...

What I Can I Do Now I'm Online?

It is more a case of what can't you do online. If you need to know the weather in downtown Seattle, see the satellite weather maps for the Middle East, book your airline tickets to Bali, chat on the CB network, download the latest version of the Macintosh System disks, play a game, gamble with the stock markets, order a bargain software package, scan the AP news wires, send a Fax message or even just enter into a conference on a topic that interests you, then Compuserve is for you and CIM lets you do it in a fast and friendly way.

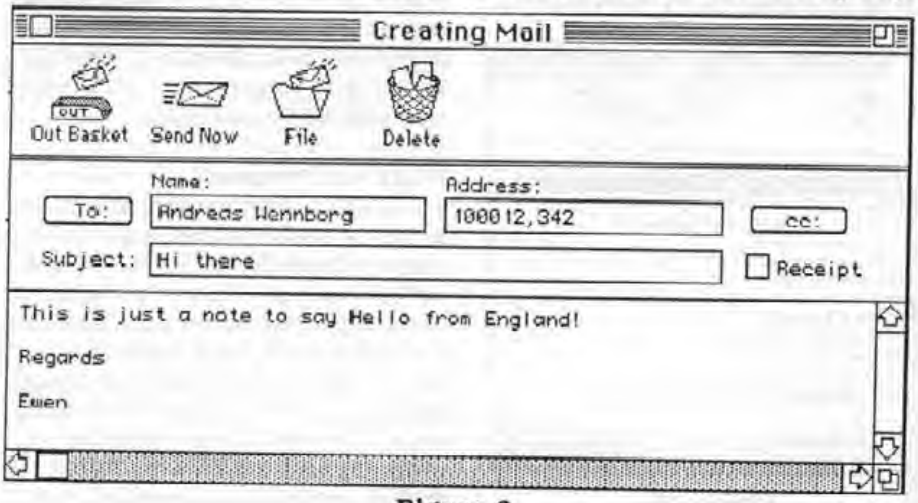


Figure 3

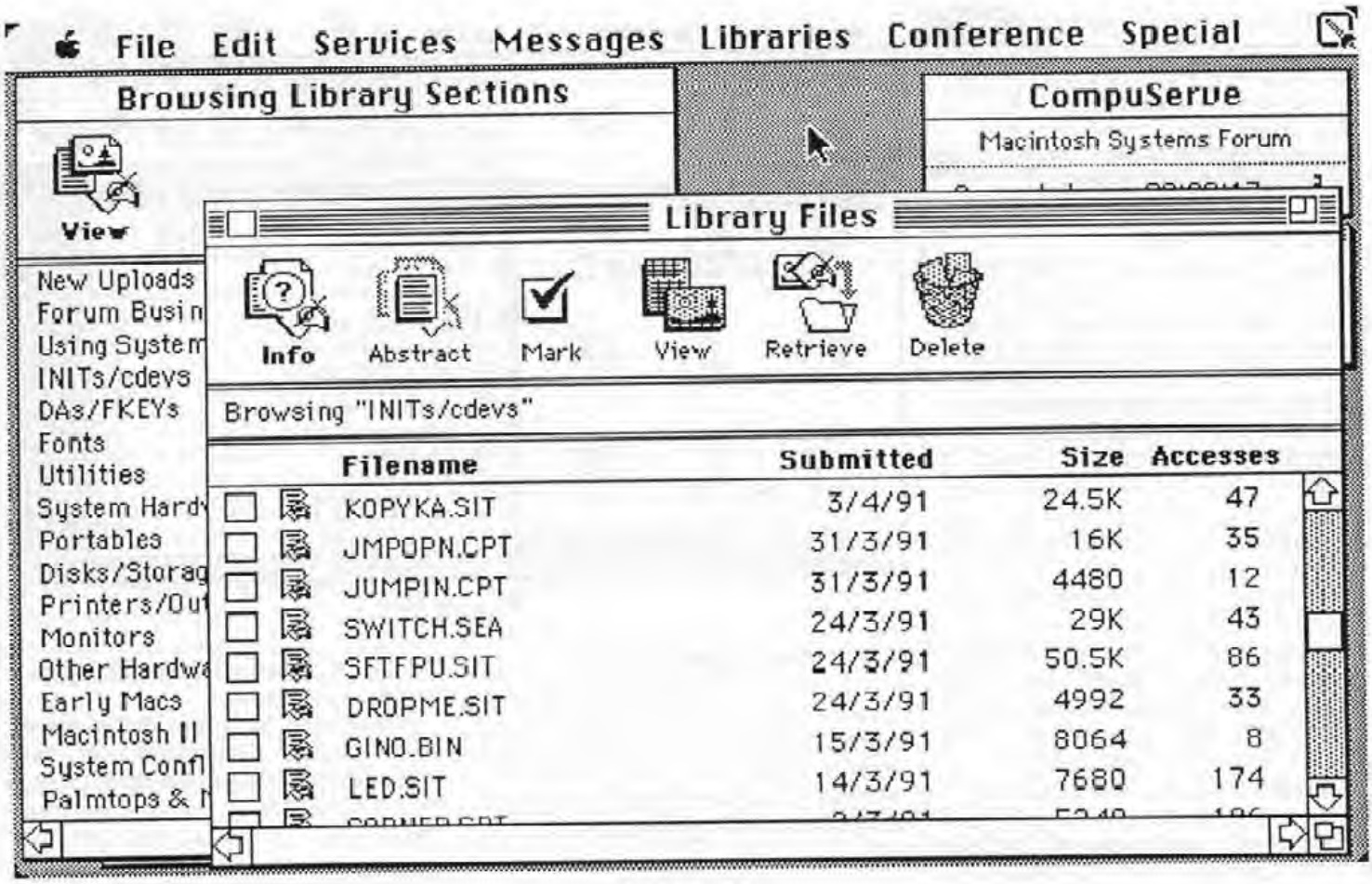


Figure 6

OK I Want to Send a Message to Someone

Perhaps the greatest power of CIM lies in its message handling. Time online costs money and so to limit your call charges it is easier to prepare your messages offline. CIM allows you to do this. Before you go online prepare your messages and place them into your Out Basket (see Figure 3). You can build up an address book which allows you use to fill in the 'To:' box in the blank message form. Full cut and paste facilities allow you to paste in messages and text from other sources into a message. Finally you post the completed message into the 'Out Basket'.

When you have prepared all the messages you want to send, you select 'Send & Receive All Mail' from the Mail menu and stand back (see Figure 4). CIM will proceed to do what it has been told and will go online, send from your 'Out Basket' and then capture all incoming messages to your 'In Basket' on your disk. You then come offline, prepare your answers, and repeat this process. Two short sessions with a minimum of time online and you will have dealt quickly and efficiently with your mail.

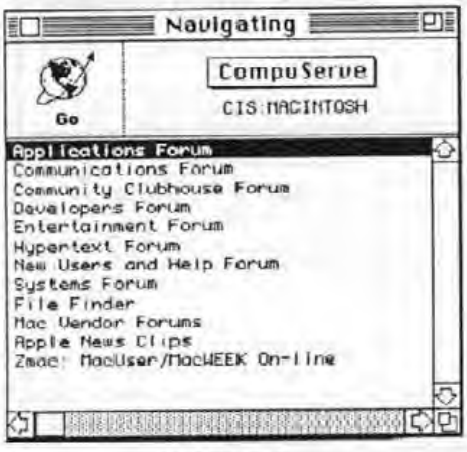


Figure 5

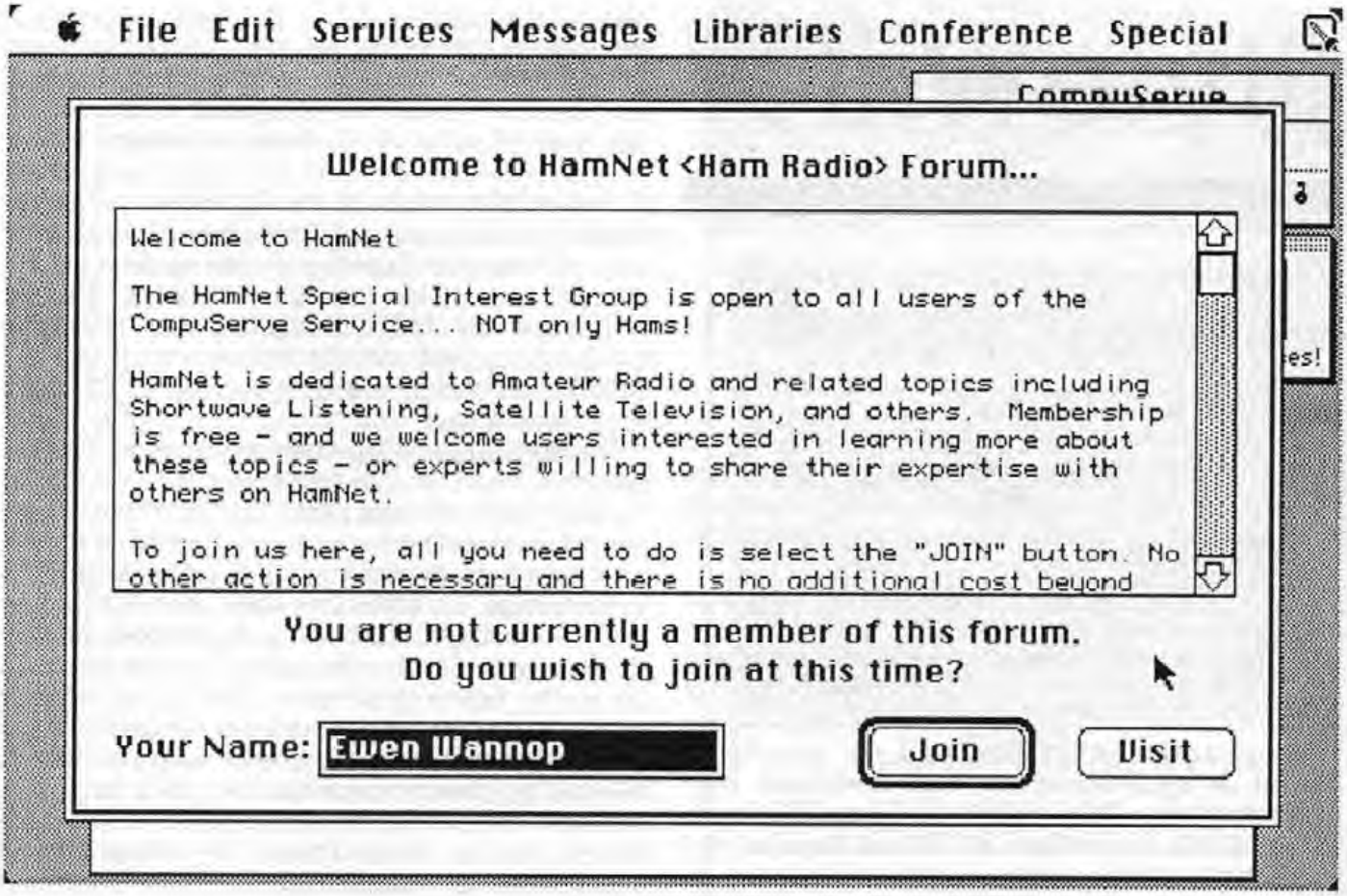
What Are Forums?

Although Compuserve has many facilities and features, perhaps its most powerful offering is its specialist forums. There are over a thousand of these in all. Each forum conforms to a standard format with a message section, a software library and an online conference area. For the Macintosh user you probably will want to go direct to MAUG or the Micronetted Apple User Group forum. This is where you will find all the areas of most interest to you (see Figure 5). Do not forget however the main Macintosh menu. You will get to that by making a GO MAC call from the Services menu. There you will find other supporting forums of interest to you.

Once into a forum you will find that the top menu bar will have changed and now displays a new forum menu (see Figure 6). Here you can browse the messages or the file libraries. All this is explained in the comprehensive CIM manual.

The message areas will cover many and varied topics. You can prepare messages for these areas offline if you wish or reply directly to any you see while online. There are several ways of viewing these messages from a simple scroll to a full map of what is where and who has sent them.

The conference mode is fascinating. I have taken part in conferences and can only describe them as addictive. Be careful or you will find it costing you rather a lot in online time!



CIM supports Compuserve B+ downloading in the forums. In the UK we are calling Compuserve over a network which goes into space by satellite to get to and from us. The delay between sending and receiving data is considerable. With standard protocol downloading each Xmodem or Ymodem packet has to be acknowledged before the next packet is sent. This can add an overhead of a second or more to each packet. An Xmodem download can take over twice as long as it would to a local system like TABBS with such a delay between packets.

Compuserve B+ protocol sends out two packets instead of one. When the first has been acknowledged it will send out the third packet and so on. This has the effect of almost continuous data transfer with no waits between the packets. The speed achieved by this send ahead method has to be seen to be believed.

CIM Support Forum

A special forum is available for the support of the CIM program. Here you will be able to ask the actual programmers and support staff for help on any matter relating to CIM. I was surprised at the number of topics in the CIM SUPPORT message area. As I had found CIM so easy to use I could not see how anyone could be having problems with it. But if you do have a problem you will undoubtedly find the answer either already there or forthcoming within a short time.

Conclusions

This has not been so much of a review as a list of what Compuserve can do when you use CIM. I have not been able to fault CIM. The manual supplied with CIM is a complete operating manual for Compuserve using CIM rather than the normal generic manual for any comms program. In 300 pages it comprehensively describes all the features of Compuserve and how to use them. It is very well laid out and being ring bound is easy to use. At over two inches thick the cardboard box also makes a good door stop when you are not online!

CIM is constantly being updated. At the time of writing I was using version 1.03. By the time you read this the next version 1.5 should be available. Whatever happened to the numbers in between is not clear! The changes with 1.5 are many but will not affect the overall look of the package.

What else can I say? If you are going to access Compuserve then CIM is the best value for money of any comms program for the Mac.

❑ See you all online soon and don't forget to send us your Compuserve ID's ...

Ewen Wannop (76224,211)

info

Product : Information Manager
Publisher : Compuserve
Available from :
Compuserve/Forum
15/16 Lower Park Row
P.O. Box 676
Bristol BS99 1YN
0272 2551111
Price : £15.50 inc P&P

Value :
Performance :
Documentation :

StyleWriter

A review of this new printer from Apple Computer

by Terry Cymbalisty

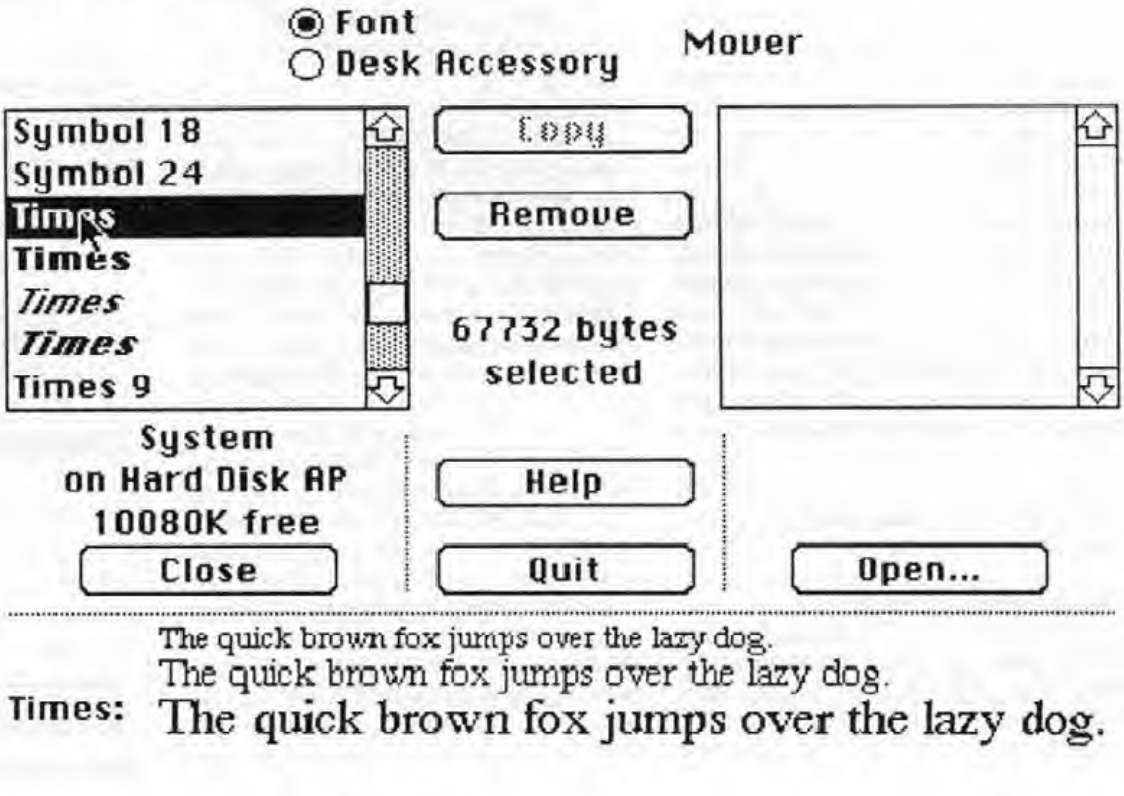
I needed a decent printer for my Mac Plus. I was fed-up with my ImageWriter II. It was too noisy and the output quality was not up to standard either.

I had heard that Apple were to launch a new range of printers at the MacWorld Expo at the Birmingham NEC so that was an excellent excuse to attend. The new range was indeed in great visibility and I obtained a comprehensive demonstration from the staff on the Apple stand. It was everything that I wanted. The output quality was amazing! And as for the price, £295, incredible! £100 less than what I expected.

I scoured the show looking for the best deals, which I found on the Macpoint stand. They were even giving away a copy of "Norton Utilities for the Macintosh". When I told them that I had already got a copy, they offered to supply me with a copy of "On Location", a £99 value instead. I quickly bought a StyleWriter there and then.

When I got home with my new printer I discovered that I needed System 6.0.7 and I only had 6.0.5. Not to despair, I copied the supplied StyleWriter Chooser document on the StyleWriter Installation disk into the System folder on my hard disk and told my Mac about the new printer using the Chooser DA. This got me going but I could not make use of the new scalable Truetype typeface technology. The following day, I visited my local dealers, Eltec Computers in Bradford, who told me that all I needed was the latest version of the Chooser (version 3.6) desk accessory which they supplied to me free of charge. I copied the Truetype INIT file from the StyleWriter disks to my hard disk System Folder and over-wrote my copy of Font/DA Mover with the version on the StyleWriter disks (version B1 4.1). Then I restarted my Mac, installed the Truetype typefaces using Font/DA Mover, reinstalled the StyleWriter using the new version of Chooser and I was away.

The StyleWriter output quality is amazing. It is based on the Cannon Bubblejet BJ-10E which means that replacement ink cartridges are available from the high street from such stores as Dixon's. It weighs just 7.5 pounds, is 12.5 inches high, 13.25 inches wide, and 5.6 inches deep, allowing it to fit into a small space on any desk or table, and to be easily carried around. Indeed it takes up no more desk space than a Mac Plus keyboard. The printer is connected to the mains supply via a power adapter, which means, I guess, that a battery pack ought to become available real-soon-now. Up to 50 sheets can be loaded into the printer via a detachable cut-sheet feeder. Front and rear manual feeds allow for letterheads, envelopes, transparencies and other such options. The printer is extremely quiet and for me, preferable to a noisy tractor feed dot matrix ImageWriter printer. In draft mode, the printer prints at 180 dpi whilst in normal mode 360 dpi. You can also



reduce the image to print at 80,60,40 and 20%. Even at 20%, the text was still legible. The printer is reasonably quick. I took five minutes to print this two page document on my Plus. Note that no printing occurred during the first three quarters of a minute whilst the computer and Mac were thinking. A faster Mac would reduce this time. The ink on a newly printed page dries quickly and I had no problems with smudged ink.

StyleWriter

As stated earlier, the printer comes with Truetype fonts, the new Apple/Microsoft font technology and replace-ment for postscript fonts. These typefaces are:

Courier — A serif non-proportional typeface, useful when one wishes to emulate typewriter output, also useful for program printouts.
Times — A serif proportional typeface, a standard choice for most documents.
Helvetica—A sans-serif proportional typeface.
**Symbol*— Various non-letter characters.

The printer comes with three floppies containing the new typefaces, the installation script and various utilities. One also gets a 115 page manual which is aimed at the absolute beginner (one is advised not to operate the printer in the bath!). Basic operations are explained in incredible detail but the reasons why one should retain the old bit-mapped versions of the supplied typefaces and how bit-mapped and Truetype typefaces interact with one another and other technical details were either ignored or glossed over. There are various things which the StyleWriter does not do. These include the inability to print in the background using Multi-Finder, not being able to network the printer (the printer only includes a serial interface for which the corresponding cable is included) and not being able to print multipart documents (ie using carbons) but I can live without these. Also, only the Mac is supported, ie NOT the Apple //. Come on Apple! What about it? Perhaps here is an opportunity for for some budding programmer? I've heard various stories of how the HP inkjet printers (which also use Canon engines) give very short ink cartridge lives. I hope that Apple have sorted this out. Also, I've heard that the printer is only good for 6,000 sheets of printout. This equates to only 12 packets of A4 photocopier paper. There was no mention of this in the Apple documentation. The world's first disposable printer? Come clean Apple.

In summary, I am very pleased with my purchase. It comes with my recommendation.

Value for money	★★★★★
Performance	★★★★
Best Buy	

Clocktower

Callers welcome, but please phone first.
Add £5 carriage to any goods less than £150.
Add 17.5% VAT to these prices - Apple 2000 members deduct 10% from the final total. VISA & ACCESS accepted. Prices and offers are subject to availability and are subject to change without notice.

NEW PRODUCTS FOR MACINTOSH FROM APPLIED ENGINEERING

Authorised Dealer
LC FASTMATH WITH FPU £170 ★ DATALINK LC WITH FPU SOCKET, MNP5 & FAX £265
IIsi QUICKSILVER WITH FPU SOCKET AND SE30 STYLE CONNECTOR FOR SE30 BOARDS £280
IIci CACHE-IN £210 ★ CACHE-IN 50MHz £1350
MAC II QUADRALINK GIVES 4 SERIAL PORTS £200
PORTABLE MACRAM (up to 8 MEG MEMORY) FROM £320 1Mb ★ DATALINK PORTABLE WITH MNP5 & FAX £210
CLASSIC MACRAM £62 - 0Mb ★ £112 - 1Mb ★ £250 - 3Mb
3.5" HD 1.4 meg DRIVE FOR MAC £220.00
3.5" 800k DRIVE FOR ANY APPLE £170
DATALINK MODEMS FROM £160
(FAX AND MNP5 OPTIONS FOR MAC & IIGS)

BLUEPRINT
The re-manufactured toner cartridge that needn't cost the earth. Pre-paid mailer for retuning empties in every re-cycled box. Long life drum replacement, gold-plated corona wires, top quality toner, longer life and fully tested, sealed cartridges are packed in metalised bag with swab and fuser pad just like original. No waste, no pollution, no mess, no waiting for returns.
Series I (EP) £55 Series II (EPS) £57
New Higher density DTP version soon - call for brochure

AMR 3.5" drives £140 (1.4Mb/Mac 800k/Apple II)

Replacement batteries for any machine - call

★ **NEW** ★
APPLE EQUIPMENT REPAIR SERVICE - CALL FOR DETAILS

Syquest R45Mb Cartridge drive £490 including one cartridge.
80Mb removable soon! Spare cartridges - call.
Hard drives - from 40Mb - £275 to any size/price
CD ROM and optical drives - call
All CLARIS products and upgrades available
Beagle's FLASH economical networking for Mac £110

3.5" DISCS DSDD from 40p each in 20s
HD from £1
Sony bulk 3.5" DSDD from 52p HD from £1.20
Sony & 3M Boxed 10s DD £6.50 HD £13
LASER TONER (HP branded) £68
Imagewriter ribbons black £3.35 colour £7.25
Apple branded £8.25
Original and compatible supplies for any make of printer, copier or fax machine, call for quote.

See advertisement earlier in this magazine for more products and offers

Clocktower

84a Weston Park, Crouch End London, N8 9PP.
Tel. & Fax.: 081-341 9023
Callers welcome, BUT PLEASE PHONE FIRST!

ISHIDO
" The Way of Stones "

A review of Accolade's strategy game

by W. G. Littlewood

Ishido has simple rules but is a complex strategy game. This game, marketed through Accolade, is a well-produced program as one expects from them. The program, on three disks, comes along with a manual, a short story about a stone player and a circular item for access to the program.

I know that these access items are to try and reduce piracy but they are also a bother to licensed users as one has to hunt them out before one can play the game. The access is by matching two symbols and two words on three concentric cards which results in a 4-digit number appearing in a window which has to be typed in before one can play the game.

There are two versions of Ishido on the disks, one for monochrome Macs and the other for colour Macs. This review is based on the colour version loaded onto an LC though the black and white version was also loaded to provide clearer illustrations. There are clear instructions on how to load the appropriate version. A hard disk is required for the colour version plus 2Mbytes of storage. The black and white version requires 1Mbyte of storage and an 800K drive.

The game of Ishido is played on a board that is 10 by 8 squares and is played with 72 stones which consists of two sets of 36 stones, the two sets being identical. Each stone has two characteristics — for example there will be a distinct symbol on the stone face and the other characteristic is colour for the colour version and a pattern-fill for the monochrome version. Each characteristic must have six variants. So six symbols and six colours/patterns give rise to the 36 different stones which are then duplicated to make up the 72.

The board has an initial set up as shown in Fig 1, where six stones are already on the board, two in the centre diagonal to each other and one in each corner. These six stones between them show all the values of the two characteristics. The play is to place stones which are drawn randomly from a pouch onto the board such that they satisfy certain simple rules. The stones must be placed next to one or more of the stones already on the board. There are four possibilities.

Placed in contact with one stone only the new stone must match a value of one of the characteristics of the old stone. Placed in contact with two stones then the new stone must match one characteristic of one of the old stones and the other characteristic of the second old stone. Contact is along edges not diagonally at corners. If the stone is played to contact three other stones then two of these must match one characteristic of the stone being played and the third must match the second characteristic. The final possibility is to be able to play a stone into the middle of four stones already played, a 4-way play, when two of the stones match one characteristic and the other two stones match the second characteristic. That is basically it. You keep playing the stones one by one from the pouch until either they run out or you are unable to play the stone anywhere (the computer kindly lets you know if this is the case).

There is a help facility which will show you the possible places

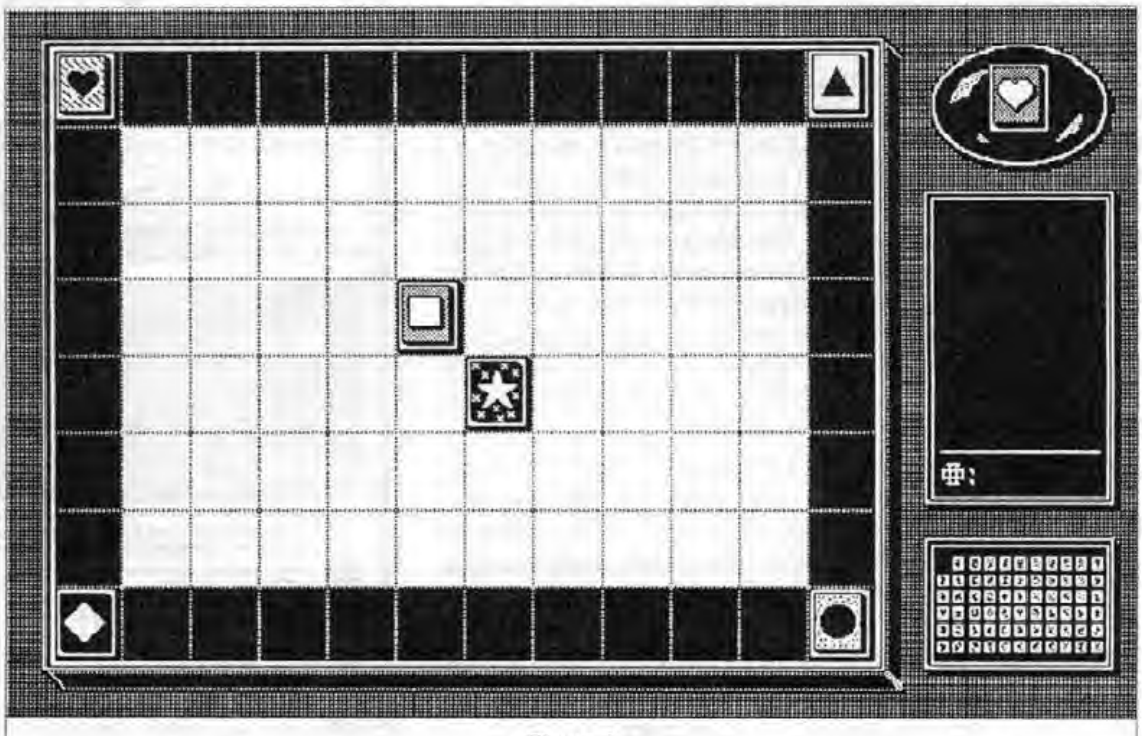


Figure 1

where the stone can be placed and indeed you can take back the previous stone if desired. You may also look ahead in the pouch. However, if any help facility is used then you forfeit the right to be entered onto the high score lists.

There are four styles of playing which are solitaire, co-operative, tournament and challenge. Solitaire is as you would expect — you play by yourself. You can ask the Mac to play by itself which can be instructive although it is a little fast to absorb it all. In co-operative play you can have two people combining (but this is essentially solitaire) but you can play with the Mac as partner taking alternate turns for the greater good of both (see challenge). Tournament play is where as many players as you like can play one after another playing with the same pouch and with a time constraint of from 1 to 60 minutes. Fewer than five minutes is probably not very satisfactory though. The tournament can carry over sessions until you specify a new tournament so it could also be used to develop skills I suppose. Finally the challenge format is where you play against someone else or the computer taking alternate turns and scoring separately — this requires a different strategy as you have to restrict your opponents scoring ability as well as enhancing your own. Also in the challenge you specify the amount of thinking time allowed per move, from 1 to 60 seconds. If a participant runs out of time they lose that go and the stone may then be deposited by the opponent: the Mac never runs out of time though!

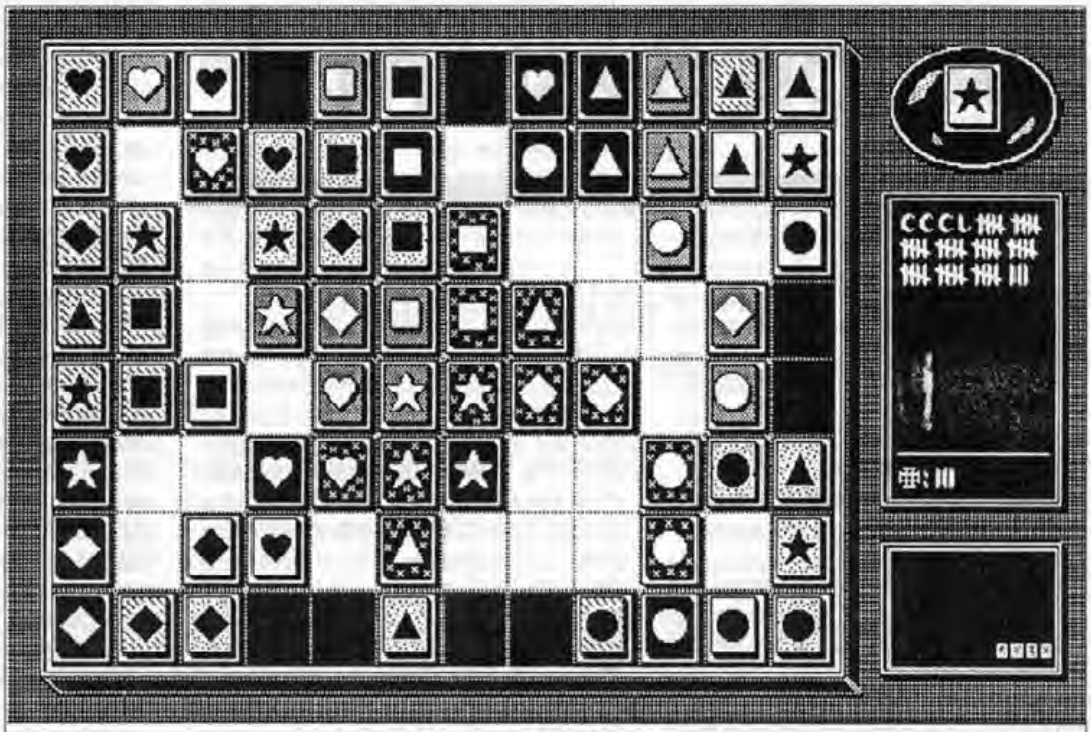


Figure 2

Fig 2. shows a solitaire game at the end of play where 3 four-ways have been scored, see scoring pad to right. Bottom right shows the pouch (with 5 stones left) and top right is the next stone to be played. The scoring using roman numerals is the modern form.

There are two scoring methods — ancient and modern. In ancient scoring there are only two figures of importance, how many 4-ways were created and how many stones are left in the pouch at the end. In modern scoring you score for the number of contact points for each tile played except that the outer edge squares on the board do not score. Furthermore every time that you get a 4-way the scoring rate doubles. You can then get bonuses if you have three or less stones left in the pouch on completion — if you empty the pouch this can be quite significant. A high score table is maintained for both scoring systems which you choose before you play. A separate high score table is kept for the current tournament (modern scoring).

The last aspect of Ishido is the 'Oracle'. This is for those who believe in 'synchronicity' and follow the I Ching. Before you play you can select the Oracle option — when the game starts the Oracle will ask you for your question which should not be of the sort that requires a yes/no answer. Then you have to create a 4-way during play to get the Oracle's response. The response is dependent on the actual time that the 4-way is created (synchronicity) and the stones involved. The response will supposedly give you something to meditate on so that you will then realise the answer to your question.

The whole game is beautifully produced with different mentors, who guide you if you make a mistake, and different 'victory' scenes depending on the stones used. A small complaint that I have is that, in the colour version, it seems to take quite a long time switching, for example, to the high-score tables from the board and back. It seems to be building up the material bit-by-bit for display.

Nevertheless, it is good value and a worthwhile game for the Mac which will provide hours of thought and entertainment. Highly recommended. It is available from MacLine (081-643 4626, credit cards accepted) at £32.00(+£2.50 p/p)+VAT (total £40.54).

May the 4-ways arrive early for you!

Program	❦❦❦❦❦
Documentation	❦❦❦❦❦
Value	❦❦❦❦❦

Info on System 7

Information from Apple Computer on the capabilities of System 7.

Apple Ships System 7: New Upgrade Offers Breakthrough Capabilities

On May 13, 1991 Apple Computer, Inc. announced that it has begun shipping System 7, the much anticipated upgrade to the Macintosh® computer system software. The announcement took place at the annual Apple Worldwide Developers Conference in San Jose with more than 2,000 Macintosh software application and hardware developers in attendance.

"System 7 delivers the technologies that will define tomorrow's computing environment--today," said Roger Heinen, Apple's vice president of Macintosh Software Architecture. "It brings breakthrough networking, productivity, and information-sharing capabilities to the industry's most sophisticated platform. And it does so seamlessly and consistently. As such, System 7 sets new standards for software development and further extends Apple's technology leadership."

System 7 is the most significant enhancement to Macintosh system software since its introduction in 1984 and will provide all Macintosh users—both existing and future users—with even greater ease-of-use and new, powerful capabilities.

System 7 works on all Macintosh computers from the Macintosh Plus, Portable and Classic to the powerful Macintosh IIfx. System 7 is compatible with most of the more than 4,000 Macintosh applications currently shipping, and has inspired more than 100 new products that offer Macintosh users cutting-edge technology.

System 7 Gives Users Immediate Benefits

System 7 will immediately offer users new powerful capabilities and make Macintosh even easier to - use. Customers who upgrade to System 7 will receive the immediate benefits of new features such as TrueType™ font technology, Virtual Memory, File Sharing, System 7 Finder®, Multitasking, Balloon Help™ and 32-Bit Addressing. These new technologies will immediately add value to all existing Macintosh applications.

Great Looking Type at Any Size: TrueType

System 7 offers all Macintosh users high-quality text at any size on any Macintosh screen and on the printed page with TrueType, Apple's industry-endorsed outline font technology. TrueType is compatible with most existing applications and bitmap fonts and provides users with smooth type quality on the screen and on any output device such as PostScript® and non-PostScript printers, imagesetters, and film recorders.

Easier to Use: Finder and Balloon Help

In addition to offering Macintosh users more powerful capabilities, System 7 provides all users with an even easier-to-use computing environment. The System 7 Finder, also known as the user's desktop, has been refined to provide greater simplicity and power so that customers can quickly locate and use their information. All aspects of the Finder including—fonts, desk accessories, control panels and even the System—can be opened by simply double-clicking on them. This provides one consistent and intuitive double-click metaphor across the System. In addition, the new System 7 Finder makes system management and set-up easier: files, folders, and applications can now be added to the Apple® Menu; users can have outline views of all files and folders; and fonts, system extensions, and control panels, can easily be installed by just dragging them to the System Folder. The System 7 Finder offers all users many refinements to the Macintosh interface, reinforcing the Macintosh reputation as the most intuitive, easy-to-use personal computer platform.

System 7 also provides Macintosh users with the industry's first interactive System-wide Help system. Unlike other help systems, Apple's Balloon Help is non-modal, allowing users to get help while continuing to work. When customers turn on Balloon Help and point to any object on the screen, a balloon appears that describes the object they are pointing to and how to use it. Macintosh software application developers are also incorporating Balloon Help into new releases of their programs. This feature will enable users to learn applications more quickly and get more value out of their applications, by providing an easily accessible reference to more sophisticated, but perhaps less used features.

Fast Access to Information: Finder and File Sharing

System 7 offers breakthrough technologies to allow Macintosh users to quickly access files and to share information with other users. New capabilities have been added to find and access files. By typing in a word or phrase and selecting "Find," the system searches the hard disk and automatically brings the file to the desktop. Find also offers more advanced options so users can perform more detailed searches. For example, users can find all files that they worked on today or files that were labeled with a specific color. The new find capability offers users fast and easy access to their files.

File sharing is a fundamental extension to Macintosh that allows any user to share designated items (files, folders, and even whole volumes of information) with any other user over the network, without a dedicated file server. File sharing follows Apple File Protocol (AFP) standards, which means that any

System 7 user can share files with any Macintosh System 6 user, and by using third-party products with DOS and Windows users. File Sharing includes a complete security model giving users the ability to provide levels of access and password protection.

The System 7 Finder offers users a new capability known as aliases. Aliases allow all Macintosh users to organize their system the way they prefer and puts information just a double-click away. An alias, usually about 2K in size, of any file, folder, application, or even a file server, acts as a pointer to the original object. With aliases, users can have access to documents, folders, and applications from more than one location. For example, a user may work with a particular word processor each day and would like to have it on the desktop but also organized within an applications folder. With aliases users can do both without taking up additional space on the hard disk.

System 7's new capabilities offer Macintosh users a tightly integrated computing platform unequaled in the industry. Aliases and file sharing provide users with numerous benefits individually, and work in combination to provide even more capabilities. For example, Macintosh users can carry an "office on a disk" by making an alias of their hard disk, placing it on a floppy disk, and when the user goes to any system on a network (across the hall, downstairs or even to Europe) the user has access to the hard disk by just double-clicking on the alias and typing in their password.

Memory and Multitasking: Virtual Memory and 32-Bit Addressing

With System 7, multitasking is a standard part of the Macintosh system, allowing users to work on several tasks concurrently. For example, a user can recalculate a spreadsheet, print a file, sort a database, and upload a file to a network while continuing to work on a word processor document. System 7's Virtual Memory expands the Macintosh's memory through software so that Macintosh users can run more and larger applications. Virtual Memory uses the hard disk as an extension to RAM providing users with more memory for peak use times. In addition, 32-bit addressing allows users to install and access more than 8MB of RAM. The additional memory users can access will provide additional power for large applications and tasks such as animation, computer-aided design, and scientific visualization.

System 7 Power is Unleashed Through Exciting New Applications

In addition to the powerful new capabilities users will see as soon as they install System 7, a myriad of new applications will be available that demonstrate the depth of power this new system software offers. Apple has worked closely with Macintosh developers since System 7 was announced, resulting in breakthrough applications that are available only on Macintosh. These new applications are expanding the scope of personal computing by standardizing on the unique new features System 7 offers.

Publish and Subscribe

In 1984, the Apple Macintosh introduced the concept of "copy and paste," allowing users to share graphics and text among different files within different applications. With System 7, Apple has taken the "copy and paste" metaphor one step further with dynamic document links known as "publish and subscribe." Publish and Subscribe enables users to link any two documents—regardless of the applications' vendor—guaranteeing automatic updating of information. This unique capability of System 7 works over a network and will greatly enhance the collaboration of individuals and workgroups.

Apple Events

Apple events is the underlying messaging language that applications use for sophisticated communication with other applications. It provides the foundation for applications to seamlessly work together sharing information and features on the same machine or over a network. Through new applications that support Apple events users will be able to use features of a variety of applications while working in one application. For example, an accounting package can pass inventory data to a spreadsheet, instruct the spreadsheet to graph the data and retrieve the graph for display in its own report.

Data Access Manager

The Data Access Manager, which ships as a standard component of System 7, provides Macintosh applications with the underlying technology that enables data access from remote host computers, regardless of the host computer, the connecting networks, or the database software.

System 7 Offers Macintosh Users a Smooth Upgrade Path

System 7 is unique to the personal computing industry in that it offers all existing Macintosh users a smooth upgrade path. Apple's stringent design goals required that System 7 run on all Macintosh computers from the Macintosh Plus, Portable and Classic to the powerful Macintosh IIfx. In addition, Apple has developed a suite of tools for customers that make the transition to System 7 as easy as possible.

Before You Install

Apple has developed a HyperCard® stack entitled Before You Install, to give users a better understanding of System 7 and system compatibility. Before You Install—an industry first—features two sections of information, What's New in System 7 and the Compatibility Checker. What's New in System 7 helps customers find out more about System 7 and explore some of the new features before upgrading. The Compatibility Checker—an industry first—provides customers with an easy-to-use, automated tool for checking application, desk accessory, and control panel compatibility before moving to System 7. The Compatibility Checker, available in the United States, includes information on over 650 products. In addition to the Before You Install stack, Apple provides all users with a *Compatibility Guide* which offers the flexibility to use the electronic Compatibility Checker or the paper-based guide to find out about system compatibility.

Network Install

With System 7, Apple has also

optimized the installation process for group work environments. As part of the System 7 Group Upgrade Kit, Apple also includes a network-install version of the software. Users will be able to upgrade systems over a network with the Macintosh one-button install. This process will alleviate the network administrator's time-consuming task of manually upgrading many systems.

System 7 is for Everyone

Macintosh users who upgrade will receive the immediate advantages of System 7's many new built-in features. System 7 works with all Macintosh computers including, the Macintosh Plus, Macintosh Portable, Macintosh Classic through the Macintosh IIfx, with 2MB of random access memory (RAM) and a hard disk. System 7 is available to users through two versions, the System 7 Personal Upgrade Kit and the System 7 Group Upgrade Kit. Apple will include System 7 in the box with all new Macintosh computers by mid-summer in the United States.

Personal Upgrade Kit

The Personal Upgrade Kit includes 10 floppy disks containing System 7 software, the Before You Install stack, and HyperCard version 2.1. In addition, the kit contains 90 days of free upgrade phone support, new user manuals and the System 7 *Compatibility Guide*. The Personal Upgrade Kit is available immediately in the United States at the manufacturer's suggested retail price (MSRP) of $99. Availability, pricing, upgrade kit contents and support options outside the United States will vary by country.

Group Upgrade Kit

The Group Upgrade Kit includes everything that is in the Personal Upgrade Kit, plus a System 7 CD-ROM, 180 days of free upgrade phone support, site license and *Group Upgrade Guide*. The System 7 CD-ROM includes a System 7 configuration that can be installed from across a network, an array of utilities, and online documentation. The Group Upgrade Guide offers network administrators an easy-to-use resource for upgrading small and large groups of users in varied network environments. The Group Upgrade Kit is available immediately in the United States for $349 (MSRP). Availability, pricing, upgrade kit contents, and support options outside the United States will vary by country.

System Software 7.0: Product Description

Copyright 1991, Apple Computer, Inc.

As of May 13, 1991, Macintosh users with at least 2 megabytes of memory and a hard disk can use System Software Version 7.0. This software version provides increased operating system capabilities over those available with version 6.x.

With System 7, the following features are available with current Macintosh applications.

• **TrueType**™ outline fonts have been introduced with System 7 to provide sharper text in all current applications—on screen as well as on printed output. TrueType fonts allow users to work with multiple sizes of precision fonts on the screen. Both TrueType and bitmapped fonts are supplied with System 7. The TrueType font feature allows installation of fonts simply by dragging the font icons into the System folder. As with TrueType fonts, sounds may also be installed by dragging the desired sound icon into the System folder.

• **The Finder**™ program provides easier, faster access to folders and documents by enhancing the Find command to allow for searches by name, size, kind, date, and user-defined label. The Find command locates files and brings them to the desktop. The Apple menu has been made customizable so that users can add their own programs and documents to the Apple menu for one-click access. Custom icons can be created using System 7 and desk accessories can be opened by double clicking those desktop icons. An alias capability has been incorporated into the Finder program, allowing users to file an application or a document in more than one place on the hard disk.

• **Multitasking** allows work with several programs simultaneously, while the com- puter performs other tasks, such as printing documents, copying or tranfer- ring files, sorting databases, or recalculating spreadsheets.

• **System 7's virtual memory capability** allows users to open more applications simultaneously using hard disk space, eliminating the need for additional RAM.

• **Built-in Macintosh file sharing** is provided with System 7. Files and folders can be shared with other users on the same network without a dedicated file server. The file sharing capability allows for use of the network to re- trieve files from a particular desktop while working from a different loca- tion. With System 7, files can be shared with System 6 Macintosh computers, as well as with third party products, MS-DOS®, or Windows based computers.

• **Balloon Help**™ allows for interactive reference and tutorial material to ap- appear on screens by pointing at a particular item and clicking. With this feature, software developers are able to add application specific help to their products. Users can learn about the application being used without interrupting the task being performed.

The following System 7 features are available with new versions of Macintosh applications:

• **Publish and Subscribe** is a feature that allows users to automatically update information by creating links between documents—a spreadsheet and a report, for example—so that changes made in one document are automatically reflected in the other via updates across the network.

• The improved data access capability provides built-in access to remote host databases and allows users to extract data from remote mainframes using a single Macintosh interface.

• 32-bit QuickDraw graphics produces screen images of true photographic quality by enabling color systems to display up to 16 million colors simultaneously. This feature also allows the creation of highly detailed renderings, simulations, and animation sequences.

• Sound input now allows users to add voice comments to voice-capable word processing,

spreadsheet, presentation, and other files.

The System 7 Upgrade Kit features a "Before You Install" disk which prepares users for System 7 by introducing new features and checking for system compatibility obstacles. The installer allows one-click installation of system software for individual system installations or for multiple system installations across a network. Also included in the Upgrade Kit is the Networking Basics Tour. This tour provides information for using the networking features of System 7.

System Software 7.0: Product Specifications

Copyright 1991, Apple Computer, Inc.

• Built-in Fonts

Two types of fonts are suppled with System 7: TrueType™ fonts and bitmapped fonts. TrueType fonts include: Times® (plain, bold, italic, and bold italic), Helvetica® (plain and bold), Symbol, Courier (plain and bold), Chicago, New York, Monaco, and Geneva.

• Print Drivers

The following print drivers are included with System 7: ImageWriter®, LaserWriter®, Personal LaserWriter LS, Personal LaserWriter SC, ImageWriter LQ, Apple StyleWriter®, AppleTalk® ImageWriter, and AppleTalk ImageWriter LQ.

• Networking Capabilities

With System 7, the AppleTalk network system supports LocalTalk®, Ethernet (EtherTalk®), or Token Ring (TokenTalk®). Over 16 million nodes per network are provided for with AppleTalk Phase II networking. Using Macintosh file sharing, up to 10 folders per machine can be shared, each having an unlimited number of enclosed folders. Up to 10 guest users can be connected to a networked hard disk, with up to 50 guest users identified in the Users and Groups file. User management is built into the software to allow entry of user names, passwords, group memberships, and access privileges for opening and modifying files.

• Memory Capabilities

With 24-bit addressing, up to 8 MB of physical memory can be accessed and up to 14 MB of memory can be accessed with virtual memory. With 32-bit addresing, 1 gigabyte of physical memory is accessible and up to 1 gigabyte of virtual memory is accessible. (The maximum installable memory in Macintosh IIfx and IIci is 128 MB.)

• Performance Characteristics

System 7 is compatible with most Macintosh System 6 applications. The processor is compabible with 68000, 68020, and 68030 microprocessors, 68851 Paged Memory Management Unit (PMMU), and 68881 and 68882 floating-point units (FPUs).

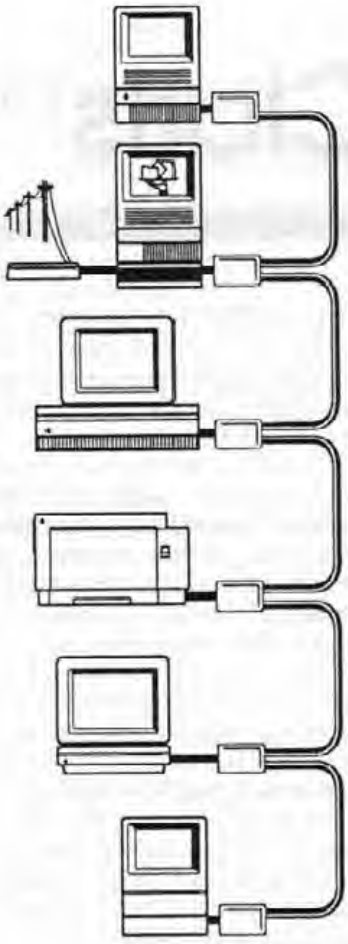
A minimum of 2 MB of RAM memory is required to run System Software Version 7.0. The amount of memory used by System 7 is 1 to 1.25 MB, depending on CPU configuration. Approximately 2.5 to 4 MB of disk space is consumed by System 7, depending on configuration.

The following disk formats are supported by System 7: 400K, 800K, 1.4 MB Macintosh disks, 720K and 1.44 MB read/write MS-DOS or OS/2.
Up to 31 characters with mixed case, spaces, and symbols are allowed with System 7's file naming conventions.
Maximum file and volume size is 4 gigabytes.
The maximum number of files per volume is 65,536. The maximum number of volumes open at once as well as the maximum number of tasks supported are limited only by the amount of available system memory.
Sound can be played from disk and input to disk. The maximum number of simultaneous sound channels is 4.

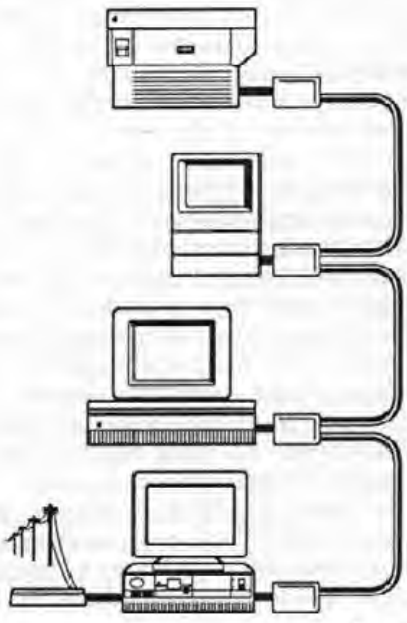
Apple, the Apple logo, Finder, and Macintosh are registered trademarks, and Balloon Help and TrueType are trademarks of Apple Computer, Inc.

HyperCard is a registered trademark of Apple Computer, Inc. licensed to Claris Corp.

PostScript is a registered trademark of Adobe Systems, Inc.



Artwork courtesy of ElectronicPen, contact MacLine (081 643 4626)



Claris™ Update

This article is compiled from recent press information from Claris™.

Claris is first with the most applications delivering the power of System 7; the entire family will take advantage of new system software. Claris Corporation have become the developer with the broadest family of software applications for the new Macintosh operating system from Apple Computer, Inc.

The flagship of the Claris System 7 family is Claris Resolve, the Macintosh spreadsheet for visible results and the first Macintosh application designed from the ground up for System 7. Claris also introduced MacWrite Pro, the Macintosh word processor for creating documents with impact. MacProject 11 version 2.5 is a System 7 revision of one of our best-selling Claris products.

Redefining how applications work together

With its broad and well-integrated family of Macintosh products, combined with the power of System 7, Claris is pioneering new ways for applications to work together. These new capabilities will allow individuals and workgroups to work together more productively than ever before.

For instance, Claris has developed sophisticated links between its products that go beyond standard Apple events. This means that two different applications will work together so seamlessly that the user can blend them together to create a new "hybrid" solution, with features and benefits tailored to the job at hand. For example, MacProject 11 v2.5 and Resolve can blend together to create a hybrid cash-flow analysis application; MacProject 11 can request Resolve to analyse information in a project plan, produce a cash flow chart and send it back to MacProject.

"Workgroup publishing," enabled by System 7 Publish & Subscribe, represents another example of Claris System 7 products letting people work together in new ways. Groups of users can now easily share data and assemble a multi-authored document across a network. Claris is delivering the benefits of workgroup publishing with its first wave of System 7-savvy products. Through dynamic links to other documents, MacWrite Pro serves as a document hub where data from System 7-savvy documents, such as charts from Resolve, can be combined in a compound document.

"Macintosh and powerful new System 7 features have allowed Claris to add dramatic new powers to its product family, changing the way applications work together," said Yogen Dalal, Claris vice president of research and development. "For the user, this means the power to blend and create virtually new product solutions, and a more effective way to share work with others. We believe the Claris System 7 family best illustrates the continuing superiority of the Macintosh platform in ease of use and innovative new computing metaphors."

Claris is especially well-positioned to deliver innovative solutions that take advantage of System 7 functionality. The company has already laid the groundwork for users to easily apply workgroup publishing and hybrid solutions which will require close cooperation between applications. With consistent key features — such as help, spell checking, and colour palette selection — across its product line, Claris offers users a tight family interaction unmatched by any other vendor. In addition, cross-platform links in Claris applications will allow users to extend workgroup publishing beyond a network of Macintosh-based Claris applications. By melding Publish & Subscribe with XTND file translation, workgroup publishing can include work created on non-Macintosh platforms.

With Resolve, the company now offers customers the broadest family of Macintosh solutions of any vendor. And System 7 functionality combined with Claris innovations, make it the best integrated family of Macintosh solutions. With its family of products, Claris is aggressively targeting virtually all Macintosh customers, ranging from small business and other new users, to corporate and education sites.

The first wave of System 7-exploiting applications

Claris Resolve

Claris Resolve, the Macintosh spreadsheet for visible results, combines extensive analytic and charting functionality. With System 7 Publish & Subscribe support, users can enhance the power of other applications by subscribing to financial data or charts created with Resolve. With both standard and unique Apple events support, or interapplication communication (IAC), users can create powerful interactive solutions by extending the Resolve analytic power to other applications, such as project management or accounting packages. Resolve also supports expanded System 7 capabilities such as Virtual Memory, Balloon Help and TrueType.

Resolve features an intuitive user interface that combines ease of use and colourful graphics with powerful new spreadsheet functionality, making it the easiest to learn spreadsheet available on any computer platform, Claris said.

With Resolve, even first-time Macintosh users can quickly create financial models, analyse numerical data with charts and graphs, and publish professional full-colour reports. And Resolve offers advanced power, including a robust scripting language, to enable users of varying levels of expertise to automate repetitive tasks or create their own custom solutions.

With Resolve, Claris now offers the broadest and best-integrated family of Macintosh applications in the industry. Resolve features tight integration with other Claris products, like its familiar interface and incorporation of common technologies such as spell checking and on-line context-sensitive help. This integration provides existing users of Claris products with a consistent experience, enabling them to get up to speed on Resolve quickly.

Resolve is the first spreadsheet built from the ground up for System 7, the powerful new Macintosh operating system from Apple Computer, Inc. And by exploiting the capabilities of System 7, users will be able to tap the power of Resolve from other applications.

"All the pieces are now in place," said Steve Johnson, Claris., UK Managing Director. "Resolve completes the Claris family of software that gives users powerful features, together with the consistency and ease to enable users to take advantage of those features. It's a good example of what we call simply powerful software."

Optimised for System 7

The flagship of the Claris System 7 family, Resolve is 100 percent System 7-compatible with support for Publish & Subscribe, Apple events, Balloon Help, TrueType and Virtual Memory.

Support for Publish & Subscribe enables Resolve users to "publish" charts, graphs and data to other documents. Users can also enhance Resolve worksheets by "subscribing" to other files created by colleagues or in other applications, and maintain "dynamic links" to documents in order to receive the most up-to-date information.

With both standard and custom Apple events support, or interapplication communication (IAC), users can create powerful interactive solutions by extending Resolve's analytic power to other applications, such as project management or accounting packages. For example, MacProject 11 v2.5 and Resolve can blend to create a hybrid cash-flow analysis application; MacProject 11 can request Resolve to analyse information in a project plan, produce a cash flow chart and send it back to MacProject.

Accessible Spreadsheet Performance

Resolve features powerful spreadsheet capabilities designed to be easy to use for even novice users.

Resolve supports a worksheet size of more than 1 billion cells and includes 149 built-in functions that allow users to easily create financial, statistical and mathematical models to match their business needs.

Resolve also features one-step charting; users simply choose "Make Chart" from the menu to create full-colour charts complete with legends.

And Resolve is designed to provide the optimum in product performance with features such as controlled selection (which allows users to search worksheets for specific cells by more than 30 cell-range criteria) and flexible multi-level database capabilities that enable users to access data stored in their worksheets quickly by using built-in database functions like ~'Extract," "Find." and "Sort."

To get business users up and running quickly, Resolve comes with seven customisable proforma business templates including Income Statement, Balance Sheet, Statement of Cash Flow, Sales Forecast and others.

In addition, Resolve incorporates familiar interface features that are consistent throughout the Claris family, such as on-line context-sensitive help, multiple zoom levels, spell checker, pop-up colour and tool palettes, intuitive menus and more.

Expressive Worksheets and Reports

Resolve's comprehensive analytic and charting capabilities enable users to present their results persuasively and colourfully with 25 chart types, including polar, wireframe, contour, surface and true three dimensional (3-D) charts.

With a comprehensive set of object-oriented, MacDraw-like, drawing tools users can quickly and easily combine illustrations, clip art, text, charts and numbers on a single page for professional full-colour reports.

Resolve also supports 32-bit colour for importing photographic quality images, a wide range of colour printers for professional quality output, and features fully formatted text paragraphs for editing text via style, font, size and alignment. And with support for sound, users can annotate their worksheets with sound notes for special emphasis.

Unparalleled Extendibility

Resolve's built-in, fully-functional scripting language empowers users of all levels with the ability to control all aspects of the programme.

A "learn mode" enables novice users to create scripts without coding and attach them to HyperCard~-like buttons for automating common business tasks. Advanced users can create more sophisticated scripts that access Pascal or C external procedures for building powerful customised solutions.

In addition, Resolve enables users to import and export a wide variety of popular file formats, including Microsoft Excel 2.2, Informix Wingz 1.0 and 1.1, Lotus 1-2-3, WKS, WK1, DIF, SYLK and Text, making it the ideal spreadsheet for sharing data within multi-application and multi-platform environments.

Key Features and Benefits:

Access Advanced Spreadsheet Power Easily

- Worksheet size supports more than 1 billion cells.
- Build models for financial, statistical and mathematical results with more than 145 built-in power functions.
- Automatic minimal recalculation speeds calculation time by recalculating only the cells affected by a worksheet change.
- Multi-level database sorting capabilities with up to 256 keys allow users to sort with precision.
- Import and export Microsoft Excel, Informix Wingz, Lotus 1-2-3, DIF, SYLK and Text files for sharing data within multi-applications environments.
- Security passwords protect data from unauthorised viewing or changes.
- Ensures worksheet files with automatic backup capability.
- Annotate worksheets with sound notes.

• Supports multiple international currencies and saves currencies with each document, maintaining formatting consistencies.
• Controlled selection allows users to easily search worksheets for specific cells by more than 30 cell ranges including data ranges, page elements, objects by type, related cells and cells by type.

Express Results With Persuasive Charts and Graphs

• Comprehensive charting capabilities allow users to choose from 25 chart types, including polar, wireframe, contour, surface and true three-dimensional (3-D) charts, for presenting data; any aspect of a chart can be modified, including colour, 3-D perspective, viewing angle, titles or series information.
• Provides a complete set of object-oriented, MacDraw'~ like, drawing tools enabling users to easily combine illustrations, clip art, text, charts and numbers on a single page for professional full-colour reports.
• Supports 32-bit colour for importing photographic quality images.
• Fully formatted text paragraphs allow users to edit text via style, font, size and alignment.
• Supports a wide range of colour printers for professional quality output.

Unparalleled User Programming Features

• Use the built-in, fully functional programming language of Claris Resolve to automate common business tasks or create powerful custom applications.
• Includes structured programming features enabling users to take advantage of their existing programming knowledge.
• Complete Macintosh interface support allows users to create complete custom solutions with custom menus, custom dialogs, radio buttons, pop-up menus, check boxes and slide bars.
• Create custom buttons and attach scripts to automate tasks.
• Scripting "learn" mode enables users to create sophisticated scripts without coding.
• User defined functions provide power and flexibility for problem solving.
• External function support allows users to access other languages, like C, for specific solutions.

Target Customers:

•**Small to mid-size businesses and first time Macintosh owners** will use Claris Resolve to create business models, visualise numerical data, perform calculations, and publish reports.
• **Existing Claris customers** will use Claris Resolve to enjoy unique product family interaction with other Claris products such as MacProject 11, FileMaker™ Pro, MacWrite™ Pro and MacDraw Pro applications.
•**Sophisticated spreadsheet users** will use the power of the product's complete programming language, to automate tasks, create personal solutions and take advantage of their existing software investment.

In-Package Support Materials:

• Users Guide
• Getting Started guide with tutorial
• Claris Resolve Functions and Scripts manual
• Quick Reference Guide
• Context-sensitive, customisable HyperHelp system.
• Business templates including proforma Income Statement, Balance Sheet, Statement of Cash Flow and others.

System Requirements and Compatibility:

•Macintosh Plus, Classic, SE family, LC, 11 family or Portable computer.
• Hard disk drive.
•1 MB RAM required (2MB recommended).
• System 6.0.5 or higher; System 6.0.7 required for sound capabilities; System 7 required for Publish & Subscribe and IAC.
• AUX 2.0 or higher

Price and Availability

Claris Resolve will ship in the UK in late summer, 1991.
The suggested UK retail price for Resolve is £275.
Exclusive UK distribution is through Frontline Distribution, Intec 1, Wade Road, Basingstoke. Hants RG24 ON E. Tel: 0256.463344 .
For upgrade order forms and information telephone 0800.899005. Users in the Republic of Ireland should phone Dublin (01) -67.814.

MacWrite Pro

MacWrite Pro offers sophisticated productivity tools and accessible desktop publishing functionality for creating documents that include both text and non-text information (graphics, tables, charts, sounds and more). It is also the first word processor to allow users to add modules of functionality. With System 7 Publish & Subscribe support, MacWrite Pro can serve as a "hub" where information from various applications is assembled into one compound document. MacWrite Pro also incorporates expanded System 7 capabilities such as Balloon Help and TrueType, and it supports Apple events.

With more than 130 new features, MacWrite Pro boasts new sophisticated productivity tools and accessible desktop publishing (DTP~ functionality. It is also the first word processor to let users add modules of functionality to meet their individual needs. These features enable users to easily create sophisticated documents that incorporate text and non text information (graphics, tables, charts, sounds and more).

Claris said MacWrite Pro is designed to be the ideal word processor for all levels of Macintosh users. Sporting the familiar MacWrite interface, it is highly accessible to new sers and offersa power users a full-featured. customisable solution.

"MacWrite Pro is a real breakthrough for us." said Steve Johnson, Claris UK Managing Director. "It still has the legendary ease of use of MacWrite 11, but it adds exactly the features people have been asking for, like tables, style sheets and desktop publishing functions. Together with new generation customising features, this is a strong family member."

System 7 Leadership

Among the first applications to support System 7 Publish & Subscribe, MacWrite Pro serves as a document hub where users can combine pieces of data from System 7-aware documents — such as charts from the Claris spreadsheet, Claris Resolve™ — to create a compound document. This functionality offers workgroups new ways to work together, providing them with an effective method of assembling and updating multi-

authored documents across a network.

MacWrite Pro also incorporates expanded System 7 capabilities such as Balloon Help and TrueType and supports required Apple events.

Powerful Productivity Tools

MacWrite Pro brings sophisticated functions to users through a powerful yet accessible set of productivity tools. Its many new features include an intuitive Tables function that allows users to easily create and manipulate tables. Users now also have the ability to create paragraph and character style sheets, naming and saving combinations of stylistic elements (like font and colour) for future use. Detailed document statistics and auto-save and back-up capabilities have also been added.

Improvements made to optimise productivity include advanced formatting capabilities. Users now have the option to create multiple headers and footers and change page guides directly on the screen. And international spell-checking has been streamlined. Users can now spell-check a multilingual document without swapping dictionaries. Users will also be able to select from an expanded range of 81 colours on a pop-up palette.

Requiring one megabyte of memory (2.5 megabytes for System 7 users), MacWrite Pro is accessible to virtually all Macintosh users. It will work with low- to high-end Macintosh computers, from the Macintosh Plus on up to the Macintosh IIfx.

Access to Desktop Publishing Functions

With easy access to DTP functions, MacWrite Pro offers users an affordable alternative to expensive layout packages for creating professional-looking documents.

Through frames that can hold text, graphics, charts and more, DTP functions are made available to any MacWrite Pro user, even those with no DTP experience. These frames can be created and fully controlled through simple menu commands. Users can easily crop and scale a frame and place it anywhere on a page. They can also add borders, colour fill-ins and patterns. Text can be wrapped around all types of frames and non-rectangular objects, and a frame can be fixed to a specific location on a page or float with text.

MacWrite Pro also features expanded graphics handling capabilities, such as the ability to "fit picture to frame" or "fit frame to picture." These capabilities are available under the Picture menu which appears on the menu bar whenever a graphics frame is created. And MacWrite Pro supports the most popular graphic file formats including MacPaint, PICT, Colour PICT2, TIFF, and EPSF files.

Additional layout capabilities include a new column icon that enables users to create columns by simply clicking a button on the ruler, and the ability to easily adjust column widths with the mouse and option key.

Users can also now change the spacing between characters with a new character tracking capability.

Claris ADDits. A Modular Way to Add Functionality

MacWrite Pro provides users with a virtually effortless way to customise their word processor. Rather than burdening the programme with rarely used features, MacWrite Pro provides users with the ability to add modules of functionality as they need them. Called Claris ADDits™, these modules are mini-applications that allow users to accomplish a variety of tasks within the constraints of a frame. This means that users requiring specific functionality such as tables or maths equation editors, for example, or those whose needs will grow in the future, have a complete expandable solution with MacWrite Pro.

To install an ADDit, a user simply drags it into the Claris folder in the System folder. The ADDit then appears as an icon on the Tools palette. A Notes ADDit, that allows users to paste text and/or sound notes on a document, and a Tables ADDit will be bundled with MacWrite Pro. More ADDits are being developed by Claris and third party developers.

MacWrite Pro also expands user access to documents created with other applications on Macintosh, IBM-PC or mainframe systems. Incorporating Claris XTND technology, MacWrite Pro allows users to easily import and export documents in more than 50 file formats.

Key Enhancements:

New and Enhanced Productivity Tools

- Create and manipulate tables easily. MacWrite Pro automatically recognises the number of columns and rows needed for a selected section of a document and creates the appropriate table. Users also have the option to perform a number of different commands on the selected tables such as adding or deleting rows and columns, showing or hiding cell guides, etc.
- Create style sheets for paragraphs as well as characters by saving selected stylistic elements and ruler information for repeated use.
- Improved formatting capabilities such as the ability to create multiple headers and footers, and change page guides directly on the screen.
- New international spelling capabilities that allow users to spell-check a multilingual document without swapping dictionaries. English, British English, French, German, Italian and Spanish dictionaries are available. New international thesauruses share the same functionality and are also available in several languages.
- Detailed document statistics provide the number of characters, words, lines and paragraphs in a selection of text, or an entire document.
- Support for 81 colours enhances reports and conveys important information.
- Auto-save and back-up capabilities protect valuable data.

Access to Desktop Publishing Functions

- Create and crop, scale and place text and non-text frames, including tables, graphics, Quick Notes and charts. Graphic file formats supported include MacPaint~, PICT, Colour PICT2, TIFF, and EPSF.
- Option to wrap or not wrap text around all types of frames. Text can also be wrapped around non-rectangular objects.
- Full-featured frame control includes the ability to select fixed or floating frames and make them transparent or opaque. This applies to all frames created within a MacWrite Pro document.
- A new column icon enables users to create multiple columns at the click of the button on the ruler.

Column widths can be easily varied using the mouse and the option key.
• Borders, colour fill-ins and patterns can be created for all frames.
• Tracking capability allows users to change the spacing between characters.

ADDits, A Modular Way to Add Functionality
• ADDits are mini applications that work within the constraints of a frame and allow users to accomplish a variety of tasks independent of MacWrite Pro. To add a ADDit to MacWrite Pro, a user simply drags it into the Claris folder in the System folder. The inclusion of the ADDit appears as an additional icon on the Tools palette, giving the user instant access to the new functionality.
• Table and Quick Note ADDits are bundled with MacWrite Pro. The Table ADDit provides the ability to create tables. Quick Notes allow users to paste small notes containing text and/or sound on a document. More ADDits are being developed by Claris and third party developers.

Advanced Word Processing Functionality:
• Claris XTND architecture allows users to easily import and export files to other applications on Macintosh, IBM-PC or mainframe systems. MacWrite Pro features support for more than 50 file formats including Microsoft Word (Mac and IBM-PC versions), WordPerfect (Mac and IBM-PC versions), WriteNow, MacWrite, DCA, and RTF.
• Mail merge capabilities allow users to create personalised form letters and mailings that are simple and convenient to use.
• Complete page-oriented WYSIWYG (What You See Is What You Get) capabilities allow users to see changes immediately on the screen as they will appear in print.
• Sophisticated and easy formatting with page preview mode, the ability to see invisible markers such as returns and spaces, hyphenation, precision formatting options and the ability to edit even when in reduced mode. Additional capabilities include footnotes and endnotes, precise line spacing, and left/right page designations.
• An extensive on-line help system for direct access to reference information without leaving the application.
• Built-in virus protection.

Target Customers: MacWrite Pro can be tailored to meet the needs of virtually any word processor user.
Business professionals will use MacWrite Pro for every day word processing needs as well as for developing more complex documents such as project proposals, business plans or newsletters that might include charts, graphs and colour. Multi-authored documents that incorporate data from a variety of applications, such as Claris Resolve or the FileMaker Pro™ application, will also be created using MacWrite Pro.
University students and faculty will use MacWrite Pro for course work, lesson plans, group presentations, correspondence and reports which feature graphic representations of data.
Current MacWrite 11 users already familiar with the MacWrite interface can upgrade to access the enhanced productivity tools, desktop publishing capability and additional functionality of MacWrite Pro.
New Macintosh buyers will have access to the best word processing package for System 7 and an easy-to learn application that can grow with them as their needs expand.

In-Package Support Materials:
• Getting Started manual, including installation information and tutorial disks
• User's Guide
• Quick Reference Guide
• Templates for memos, resumes, newsletters and other documents
• On-line context-sensitive help system

System Requirements and Compatibility:
• Macintosh Plus, Classic, SE family, 11 family, LC or portable computer.
• Hard disk drive
• 1 MB RAM required (2 MB for 16 or 256 colours; 4 MB for thousands or millions of colours)
• System 6.0.5 or higher, or AIUX 2.0 or higher

Pricing and Availability
MacWrite Pro will ship in the UK in the autumn, 1991.
The suggested retail price in the UK is £175. Current UK owners of any version of MacWrite may upgrade to MacWrite Pro for £45. Current UK owners of Microsoft Word, T/Maker's WriteNow, and WordPerfect may sidegrade to MacWrite Pro for £55.
Exclusive UK distribution is through Frontline Distribution, Intec 1, Wade Road, Basingstoke, Hants RG24 ONE. Tel: 0256.463344.
For upgrade order forms and information telephone 0800.899005. Users in the Republic of Ireland should phone Dublin (01) 767.814.
Any UK purchaser of MacWrite 11 between May 13, 1991 and when MacWrite Pro ships will receive free upgrades to MacWrite Pro. MacWrite 11 is compatible with System 7.

MacProject 11 Version 2.5
MacProject™ 11 version 2.5 is the latest release of the best-selling project management programme for the Macintosh.
MacProject 11 v2.5 offers powerful and flexible management tools for anyone with a Macintosh who plans, schedules, tracks and presents projects of any size.

System 7 Functionality: One of a family of Claris™ System 7 applications, MacProject 11 v2.5 takes advantage of the powerful functionality of the new Macintosh operating system from Apple Computer, Inc.
MacProject 11 v2.5 offers interapplication communication (IAC) links, or "Exchange," with Claris Spreadsheet, the first Macintosh spreadsheet designed specifically to take advantage of System 7, for extensible project management solutions. The direct Exchange links let users produce seven new project graphs and tables while providing the capability to customise MacProject 11 with additional reports.

Key Enhancements:
Direct Links ("Exchange") to Claris Resolve
• Use built-in links with Claris Resolve to create seven new project graphs and tables including cash

flow, earned value, project cost, resource cost, project summary, resource work, and sorted project.
• Customise MacProject 11 by linking spreadsheet scripts to create your own graphs and reports.
• The MacProject 11 v2.5 "Exchange" feature works under both System 6.x and System 7 operating systems.

Features and Benefits:
Complete Planning and Management Flexibility
• Automatic Critical Path Method (CPM) calculation helps spot critical tasks instantly.
• Plan and track an unlimited number of tasks graphically with PERT and Gantt Charts.
• Use Resource Timeline and Histogram to visually manage resource workloads and detect overallocations and slack periods.
•View and present data for selected tasks in a customisable project summary table.
• Calculate project date and cost information using either planned or actual data.
• Use subproject linking and consolidation capabilities to manage complex projects.
• Plan and monitor project cash flow automatically calculated from task and resource costs.
• Display multiple charts simultaneously for complete project overview.
• Use stationery documents to create reusable project templates featuring preferred fonts, logos and legends, as well as calendars, resources and project tasks.
•Customise and save multiple chart screen displays for easy data entry and project analysis.
• Create Cash Flow, Earned Value, and other tables and graphs via Exchange with Claris Resolve.

Powerful Resource Management Capabilities:
• Automatic and interactive resource levelling lets users spot and resolve overallocations of personnel and equipment.
• A resource levelling log shows impact of resource levelling on project schedules and offers a view of the project schedule with undo levelling changes available at any time.
• Cross-project resource analysis capabilities enable users to spot overallocations of resources working on multiple projects simultaneously.
• Unlimited resource calendars allow users to create unique, independent calendars, including custom work availability and holidays for all resources.

Professional Chart and Report Generation:
• Use search formulas to create custom tables and timelines to show task information by resource, department, date, or other specified criteria.
• Create custom reports by linking spreadsheet scripts to your own MacProject 11 menu commands.
• Text and graphic annotations allow users to communicate more effectively; add PICT and PICT2 images from MacDraw™ 11, MacDraw Pro, Claris CAD, and other applications.
• Variable document size for reducing or enlarging complex charts from 25 to 400 percent.
• Includes plotter drivers that support colour output on pen plotters up to "E" size.
• A spell checker ensures spelling accuracy with built-in 100,000-word dictionary.

Enhanced Workgroup Productivity:
• Import and Export MacProject 11 data - in ASCII, DIF, and SYLK formats - with other Macintosh, IBM PC, and mainframe applications.
• MacProject 11 offers network compatibility for maximising productivity in workgroup environments.
• Use subprojects to plan and track detailed activities and consolidate data in a master plan for overview.

Target Customers:
• **Project managers** use MacProject 11 for planning, tracking, and presenting projects of all size. Often concerned with big budget, high risk projects, MacProject 11 helps project managers focus on meeting schedules and deadlines, allocating and managing resources, and tracking project costs. Common project applications include engineering, aerospace, construction, manufacturing, and architecture.
• **General business planners** use MacProject 11 to plan, manage, and communicate projects in a wide range of less technical settings such as marketing projects, event planning and publishing.

Support Materials in Package:
• MacProject 11 manual with Quick Reference
• "Getting Started with MacProject 11" booklet
• Interactive HyperTour training disk
• On-line Help System

System Requirements:
Required Equipment
• Macintosh Plus, SE, Classic, SE30, LC, Portable, or
11 family of computers.
• Two 800K floppy disk drives; hard drive recommended
• System 6.0 or later; also System 7 compatible; A/UX
1.1 or later
• Memory: 1 MB minimum

Optional Equipment
• AppleShare file server, MultiFinder
• Colour monitor
• Apple LaserWriter, LaserWriter Plus, LaserWriter 11 NT,
NTX, or SC, Apple ImageWriter, 11 or LQ.
• Hewlett-Packard and Houston Instruments colour
plotters up to "E" size

Availability/Price:
MacProject 11 2.5 will ship in the UK in June, 1991 .

The suggested retail price in the UK is £395. For upgrade order forms and information telephone 0800.899005. Users in the Republic of Ireland should phone Dublin (01) 767.814.

©1991 Claris Corporation. All Rights Reserved. Claris, HyperTour, MacDraw and MacProject are trademarks of Claris Corporation. Apple, AppleShare, A/UX, ImageWriter, LaserWriter, Macintosh and MultiFinder are registered trademarks of Apple Computer, Inc. Houston Instrument is a registered trademark of AMETECK, Inc. Hewlett-Packard is a registered trademark of Hewlett-Packard Company. IBM is a registered trademark of International Business Machines Corporation. DIF is a registered trademark of Lotus Development Corporation.

Hypermedia: The Multiple Message

Development Opportunities on the Macintosh by Craig Ragland. Part 2 of an article in two parts.

To create a viable alternative, your product will require sufficient distinguishing characteristics that it will attract prospective hypermedia developers. Not only must it be sufficiently different from HyperCard as it is currently implemented, but it must not be made obsolete by the upcoming HyperCard version 2.0 and all the increasingly successful HyperCard add-on products. This would seem a rather scary race for any company to enter.

Another issue for those who would create and market an alternative Macintosh-based hypermedia application is that your product users will be standing alone. HyperCard developers currently enjoy an unprecedented symbiosis and acceleration of the state-of-the-art in HyperCard development. Through learning-by-example, hundreds of different approaches toward any given topic have probably already been explored. Not only are there many great HyperCard stacks in public domain, but there are dozens of outstanding commercial stacks. This level of user-support for a development environment would be hard to replicate on the Macintosh.

All this, unfortunately, is likely to drive would-be hypermedia system developers on the Macintosh to other development platforms. However, an alternative is to consider creating a HyperCard add-on product. This market actually offers many similar development opportunities (see next section).

Extending or Creating Tools for Existing Hypermedia Products

One of the most exciting product categories for HyperCard has been developer tools and extensions to HyperCard. Currently available products let HyperCard developers:

- Run relational data bases.
- Control higher quality animation.
- Add digitised sound.
- Add new visual effects.
- Add new interface capabilities.
- Generate ICON resources.
- Generate CURSor resources.
- Generate MENU resources.
- Use colour on properly equipped Mac IIs.
- Create fractal graphics.
- Print more effectively.
- Control PICT resources.
- Play MIDI instruments.
- Dump PostScript.
- Open full-sized Paint Documents.
- Move resources among stacks.
- Communicate across local networks.
- Control serial devices.
- Collect data from laboratory instruments.
- Scan documents on flatbed scanners.
- Grab data from video sources.

The majority of these products are aimed squarely at HyperCard developers. HyperCard developers create HyperCard stacks for personal use, use within their businesses, and for other end users. To the extent that a tool increases the productivity of a user, it will be appreciated. There are several opportunities for basic new capabilities which have not been commercially exploited. Given the focus of this article it is important to note that only a portion of HyperCard developers create hypermedia. The vast majority of public domain stacks follow data base models and are based on structured records, rather than linked non sequential data.

A critical issue, which a prospective developer of HyperCard extensions and tools must consider, revolves around copyright and licensing. If you provide users with a new capability, will they be able to redistribute your work? If so, on what basis? There are literally hundreds of XCMDs which are freely distributed in the so-called "public domain" or "share-ware" markets. The vast majority of these carry copyright notices by their authors. This means that they are NOT public domain and that the author retains the right to control the distribution of the product. If you wish to incorporate their work into your own projects or products, you must get (preferably written) permission from the copyright holder.

It is important that you clearly address this issue if you commercially provide HyperCard tools or extensions that others may want to distribute as part of their own work. It has become fairly common to distinguish between site licenses and commercial distribution licenses. Some products have established flat fee rates for site licenses, and royalties for commercially distributed extensions. In the commercial product "101 Scripts & Buttons for HyperCard" (which was created by the author of this article), the publisher has bundled redistribution rights into the purchase price of $69.95. This is an extremely aggressive posture which is likely to result in widespread use of the included extensions. Since the product includes such basic user-interface extensions as the ability to add menus, pick up and move buttons and fields, selecting screen regions, and resizing standard HyperCard buttons and fields, without leaving browse mode, it enables hypermedia developers to add many Mac-like capabilities to their HyperCard stacks.

There are many other fairly basic capabilities which are missing from HyperCard. When considering possible HyperCard tools or extensions you are forced into playing a guessing game about what Bill Atkinson and the Apple HyperCard development team will

add to future versions. After all, there is little reason to expend time, effort, and money developing capabilities which Apple will give away free in a future release. Becoming an Apple-seeded developer is one way to get some advance notice. The best way to accomplish this is by releasing a commercial product which demonstrates you have a clear need-to-know.

As various articles have pointed out, HyperCard does have limitations, and there are many capabilities which would improve it. Some which would truly benefit many developers and end users include:

- Navigational support in the form of graphical browsers.
- Enhanced textual or even graphical searches and sorting.
- Independently manipulable, field-based graphics.
- Real hypertext within text fields.
- A dialog box editor.
- Floating pallets.
- Any number of higher level development tools.

Apple is likely to add some of these features to future HyperCard versions. If you're able to second-guess them and also successfully market any of these extensions, you'll make some money.

Creating Information Management Applications

HyperCard is an effective tool for creating some types of information management applications. The principal constraint is the relatively poor performance of HyperTalk for some operations and the lack of some common database features (most significantly the lack of common data base search or sort criteria and the lack of data validation). HyperTalk is particularly slow at multi-record processing. If a particular application requires that frequent totals be computed, then HyperCard would probably be a poor choice. On the other hand, it might well be acceptable to periodically dump data out of HyperCard and load it into a predefined spreadsheet template for multi-record data processing.

The lack of any runtime fees for HyperCard-based applications offers a significant financial advantage. While other data base environments often offer better performance, the run-time fees involved may price the resulting applications out of range for many prospective users. HyperCard is also considerably more flexible than most data base development programs in letting the hypermedia developer control the types and forms of user interaction. While HyperCard developers can create new styles of interactions (such as knobs that turn or toggles that flip or sliding controls that slide), this level of extreme flexibility is rare in other development environments. In addition, the widespread availability of predefined capabilities that can be directly plugged into your application (see section on HyperCard extensions and tools) can make the construction of applications quite inexpensive.

Danny Goodman's Focal Point is the best known example of a HyperCard-based information management application (actually several different, slightly integrated, applications). Recently, several competing products have been released including: Organizer+ published by Dazzl; Client published by Softworks, and Hyper-Action published by Multi Solutions. These products all extend some or all portions of Focal Point; a new version of Focal Point is due out shortly as well.

HyperCard-based information management applications are somewhat like toys built out of Legos. Just as it is possible to take a Lego toy and modify its basic structure and function, HyperCard-based applications can be extended and modified to meet varying needs. However, to date we have yet to see HyperCard stacks designed explicitly to be modified. Existing applications have followed traditional software models and attempt to deliver finished applications and not user-modifiable capabilities. Just jump into Focal Point or its clones and delete various fields and buttons—it destroys function. If you delete critical components, the loss will ripple throughout the different stacks. This is much less friendly than a Lego spaceship, which can easily transform into a Lego Submarine.

Some end users would love information applications which are really easy to modify—and this means without any scripting. This would allow a general information management program to be customised for a particular vertical market. Interface extensions could be used to let users view the function of a particular button or field using a higher level perspective, and then add, delete, or change that object's functionality. This could be accomplished using an icon-based representation scheme. A couple of interesting products which use such icon-based programming include Odesta's Helix and Mainstay's VIP.

There are ample opportunities for vertical market information management products. Knowledgeable developers can tailor HyperCard stacks to meet specific information needs. his makes it possible to produce much less expensive vertical market solutions than previously feasible.

Creating a vertical market "product" can also result from creating a custom "project" for a business client. It is sometimes feasible to arrange a joint venture with an existing business in the vertical market of interest. This can be quite beneficial to both parties, as it should raise the value of your work. In your client's eyes you are raised above a simple work-for-hire contractor, as your work becomes a part of their existing and future business. Clients typically benefit by receiving more software development for their financial investment, and the potential of a highly valued product. As a developer, you will benefit from having extensive access to an expert and real-world test ground in the vertical market, as well as support for a product's development.

Creating Custom Hypermedia Projects for Business Clients

Presently, it seems likely that many more developers are employed creating hypermedia projects for particular businesses than are producing general products for a mass market. Project types are as varied as all the other categories in this section. The key advantages to creating a custom project for a

particular company are (1) you are assured your project will have a market, (2) a series of successful projects steadily reduces the amount of marketing required to bring in further work, and (3) you can often rely on the income of long-term or large projects.

Creating custom projects as an outside consultant, instead of as an employee, can also be quite lucrative. The basic financial alternatives are to bill at an hourly rate or to bid a price for a total project. Hourly rates for HyperCard developers in the Seattle area ranges from about $10/hour for part timing moonlighters to about $75/hour for established consultants. Bids are based on the project scope, but range from a few hundred to tens of thousands of dollars. The downside of developing software independently is that you have very little security. The upside is that the income can be significant and you own all of your blue sky.

The best way to maximise your leverage in creating custom work is to develop expertise in a particular vertical market, and then deliver custom hypermedia projects tailored to that market. This lets you more effectively understand and fulfil your client's particular needs. It also makes it easier to reuse work created for one client in future projects. Focusing on a particular market segment, however, may be a luxury which only comes after you routinely meet the basic costs of doing business.

Creating Information Products Using Hypermedia

Information products are those which focus on the informational content of the product rather than the product's data management utility. There are relatively few commercial products in this domain, though this is definitely an area of tremendous potential growth. Some existing or soon-to-be released information products include: DTP Advisor by Broderbund, Business Class by Mediagenics, The Manhole by Prolog Software, and Beginners Guide to HyperText by Intellibooks. Other information "products" which have been distributed by Apple Computer include the HyperCard version of The Information Exchange (which is freely supplied to Apple Certified Developers) and the MacWorld Public Information Kiosk stacks.

Information products can also be separated into a different classes: Public Access, Instructional/Educational, Reference, and Entertainment. Each individual project or product has different design requirements and constraints. However, the similarities within each of these classes call for some individual discussion.

Public Access Hypermedia

For public access systems, the chief design constraint is the lack of user experience with a Macintosh or any other computer. Fortunately, HyperCard makes it fairly simple to create easy-to-use systems. In general, public access systems must abandon almost everything Apple has attempted to mandate in their excellent text Human Interface Guidelines: The Apple Desktop Interface. While these guidelines are critical for creating consistent user interfaces for software intended for Mac users, the general public is not Mac-literate. This means that systems which should be immediately usable by naive users, you must abandon any interface item which is not intuitive and immediately recognisable. Some examples of interface components which are common in HyperCard (and other applications), but are difficult for the Mac-illiterate include: modal dialog boxes (users don't know that they have to deal with the dialog box before continuing), scrolling text fields (users don't know what they are and how they work), standard check boxes (users don't know it's really a toggle switch between two conditions), and radio buttons (users don't know they are mutually exclusive switches). In HyperCard, it is often difficult for users to distinguish between what is hot and what is not.

All of these issues are best addressed by replacing the Macintosh standard items with highly graphic alternatives. For example, to let the user toggle between two alternative states, use a graphic toggle switch which looks and behaves like a light switch. This can be fairly easily created using alternative ICONs, with appropriate scripting. Examples of these and numerous other functional and visually effective buttons are found in Stack Starter by Robertson Smith and 101 Scripts & Buttons for HyperCard published by Individual Software (and created by the author of this article).

Another constraint for public access systems is the potential for vandalism and theft. Macintoshes are valuable and must be either used in safe environments, or sufficiently protected for use in a public setting. Related to this is the vulnerability of the mouse. Mice are also more difficult for first-time users than alternative pointing devices. Designers of public access systems should consider both touch screens and industrial strength track balls. Touch screens present a different set of constraints for designers—principally that objects must be larger to hit properly, and that fingers obscure an awful lot of the screen.

The opportunities for public access information systems seem quite extensive. There are many information-intensive settings which would benefit significantly from effective hypermedia products. These include many different medical and dental settings, public information desks in hotels and stores, trade show directories, public transportation, banking information, telephone support systems, and in-store directories. This is another area where custom development and product development overlap.

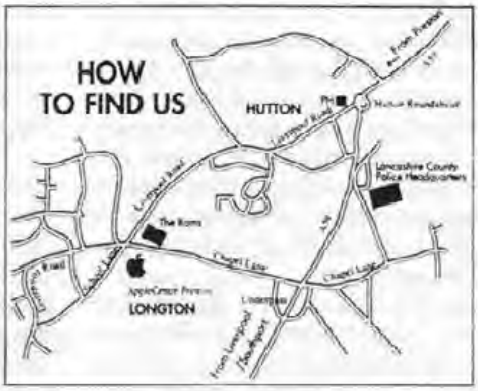
Instructional/Educational Hypermedia

One of the heaviest areas of HyperCard development is in education and training. HyperCard offers an extremely rich environment for development of training materials for almost any subject matter. The third annual CD-ROM conference book, "Interactive Multimedia: Visions of Multimedia for Developers, Educators, & Information Providers" describes several different education projects, using HyperCard as well as other multimedia software products. Computer-based training has come a long way from the simple

Preston's AppleCentre is in the Village

With fewer than 60 AppleCentres throughout the UK, you could be forgiven for thinking that they must all be in the bustling commercial centres of major towns and cities.
The truth is, most of them are – but Preston's AppleCentre is different. Situated in the picturesque country village of Longton, with private parking just a few feet from the front door, customers can visit without collecting a ticket. Once inside they will be impressed, not only by the superb corporate AppleCentre decor, but also by the friendly reception and caring attention from Apple dedicated staff.

- Five complete Apple systems on permanent display
- Eight Workstations in our air-conditioned Training Centre
- Twelve Apple dedicated sales and support staff
- Special 'Quiet Room' facility
- The new low cost colour Macintosh now available from stock!



AppleCentre℠ Preston

Holdens Computer Services

The Mansions, Chapel Lane, Longton,
Preston, Lancashire. PR4 5EB.
Tel: (0772) 615512 Fax: (0772) 615919

Apple, the Apple logo and Macintosh, are trademarks of Apple Computer, Inc. AppleCentre is a service mark of Apple Computer U.K. Limited

programmed text models of Skinner and others, though some have noted the similarities of highly interbranched, computer-based courses and the linked node hypertext model.

There is need for products which support developers of HyperCard-based training projects and products. While creating simple, branching card trees is easy using the vanilla version of HyperCard, the creation of more complex systems requires some sophisticated programming. Hypermedia based training materials should treat users with more respect than forcing them to wade through long paths of inappropriate materials. The specific materials presented on a particular subject can be dependent on one or more previous decisions, instead of being hardwired, as simple CBT programs tend to be. In addition, hypermedia challenges us to develop different approaches toward tracking and monitoring a learner's progress through material. While traditional approaches would test and quiz, hypermedia approaches might let users grab data along their trips for later synthesis and reporting.

HyperCard-based training software yells out for some form of higher level branch management aids and development tools. This approach is used heavily by Course of Action by AuthorWare, which also offers a significant alternative development environment for this class of applications.

Training products, which provide training materials for particular processes or tasks, are another potential development opportunity. To date, the bulk of training software seems to be oriented around training end users on the use of other commercially successful software packages. One of the leading publishers in this field is Individual Software, which publishes Individual Training for PageMaker, as well as numerous PC-based products. Another interesting product, HyperTutor by Channel Mark, is an interactive training product for HyperTalk. HyperTutor is, however, highly text oriented and provides little for anyone who has gone beyond the basics of HyperTalk.

There may well be significant potential for HyperCard based training products. Producing training stacks is an extremely active area within the business community, where the costs of training are increasingly well understood. Just as using Macintoshes instead of PCs saves significant training costs; creating HyperCard-based training materials is more efficient than paper-based or classroom training. The utter effectiveness of using skilled teachers to produce outstanding materials which benefit students over and over again will eventually result in extensive development of hypermedia based training and educational materials.

Reference

Many users have placed their personal reference materials into HyperCard stacks. Its high-speed Find command and ability to branch according to the idiosyncratic wishes of an author make it an excellent environment for storing cross-referenced information. Several large companies have also produced

extensive product information stacks for use by in-house sales personnel. In addition, several HyperCard-based CD-ROM reference projects are currently under development by major publishers. One of the more interesting projects is a HyperCard version of the Whole Earth Catalogue, to be published by Broderbund. A sample version of this was distributed on the Apple Learning Disc (a demo disc produced by Apple and given away at the unveiling of the Apple CD ROM player), and it is marvellous. It makes highly effective use of different graphic styles for the various sections.

One of the more extensive HyperCard-based reference projects in widespread use today is Cameo 11, produced by NOAA. This innovative system contains a data base of several thousand hazardous materials, and allows users to develop local geographic information systems. It also helps manage the hazardous material containment process by projecting wind plume area for spills. This aids firefighters in decisions regarding protective clothing, breathing apparatus, evacuation, and neutralisation procedures. Several fire departments have equipped emergency response vehicles with on-board Macintosh systems and are able to identify and cope with toxic chemicals right at the site.

There are many kinds of reference materials which could benefit from release in hypermedia formats. However, the tasks of moving the data into digital form and structuring it for effective use can be immense. Such projects often require very large budgets, particularly if the legal rights to the data must be purchased, or if significant reworking of the data is required.

On the other hand, some extremely valuable reference materials may be readily available in digital forms. For instance, extremely time-sensitive reports and papers are sold for several hundred to many thousands of dollars. These include reports on emerging markets, financial information, investment research, feasibility studies, etc. When reference material is that valuable, it can be quite cost-effective to both produce it using an information processing tool and deliver it using an information environment which adds value to the data. Today the vast majority of such reports are produced on computers (using word processors and page layout software) and delivered in paper form. Tomorrow they will all be delivered digitally and probably utilising hypermedia software. Some innovative companies will begin publishing such materials in HyperCard today.

Entertainment

The single largest class of information consumed by the average member of our culture is within the realm of entertainment. We are inundated by a barrage of media in the form of television, radio, films, and print. While some media is oriented around informing the user, many others are pure escapist entertainment. Hypermedia, with its capability of letting users actively participate, instead of just passively viewing other's interactions, should prove a very popular alternative for a great many people.

There are numerous commercial Macintosh games and entertainment products which could be easily created using HyperCard. One of the more attractive existing entertainment products is The Manhole, by ProLog Software. This marvellous product is aimed at kids from 3 to 8 years of age and links hundreds of beautifully crafted graphic cards with high levels of care and craft. Kids and adults alike respond to this attractive package with a true sense of wonder and excitement.

A major constraint on delivering HyperCard-based entertainment products is the size of highly graphic or audio oriented stacks. The Manhole fills five 800K disks, which makes it a product with a pretty high overhead cost. Entertainment products demand extensive use of graphics and sound. Using existing technologies, this requires large data spaces. The high price Apple attached to its CD ROM player has made it a still exotic peripheral, so producing CD ROMs for this market segment remains difficult to justify, though many software companies are exploring this market. The problem with selling CD ROM players is that there are so few interesting CD ROM discs. If you need a particular CD ROM disc, then you will buy a CD ROM player. Very few will buy expensive peripherals for entertainment reasons.

While data space limitations are problematic today, we can anticipate these will be solved by hardware innovations in the fairly short term. The 256 Meg Read/Write optical disc bundled with the NeXT Computer is a nice example of where we are headed. While a $50/disc overhead on the Next distribution media presents difficulties, we can expect hybrid optical disc players which read mass produced discs (like existing CD Audio discs) and also let end users write to user discs of a different format.

While it is nice to hope that hypermedia entertainment products will be of a higher calibre than existing media, this seems rather unrealistic. The beauty of well-designed hypermedia is that users can control their access. However, if the quality of the content is low, a high level of control over access adds little—though it does allow one to more easily avoid vast amounts of uninteresting data.

The Software Designer of a New Type

Hypermedia development is in its infancy. It lets information workers, as opposed to just programmers, assemble interesting software, much of which has significant market potential. When Bill Atkinson spoke at a meeting of the Seattle-based Downtown Business Users Group, he asked how many people there were HyperCard developers who were thinking of commercially distributing their stackware. About 200 out of the 800 attendees indicated they had such plans. HyperCard has created a new class of software designers and many will succeed in several different software categories.

© 1989 by TechAlliance a computer cooperative which is an independent support group of Apple product users.

Reprinted from Mactech Quarterly, TechAlliance, 290 SW 43rd Street, Renton, WA 98055.

Club Business

Minutes of the Annual General Meeting of B.A.S.U.G. Ltd., April 13th 1991.

Minutes of the Annual General Meeting of B.A.S.U.G. Ltd.
Thirty-two members of the club were present and a further twelve were represented by proxy.
The meeting was opened at 11.20 a.m.

1. Minutes of the last Annual General Meeting held on April 28th, 1990.
The attention of those present was drawn to the minutes for the AGM of 1990 which were published in the magazine for June 1990. The Chairman asked for comments or questions on these but none were forthcoming.
Mike Bass proposed that the minutes of the AGM of 1990 were accepted as a true record of that meeting and this was seconded by Ron Thompson. The proposal was passed unanimously and the Chairman signed and dated the minutes.

2. The Chairman's Report from Ewen Wannop
Welcome. As you all of course know Apple2000 is run by volunteers. Some of those are in the forefront and sit with me as part of the committee. However Apple2000 has many others who help make the whole machine work smoothly. I would like to thank all who have put something into the group over the past year. The committee will make their own reports to you, but I would like to thank them for a smooth and relatively uneventful year.

I would especially like to thank John Lee. John is disabled and unable to attend the AGM. His stalwart efforts in keeping the Force going, disk copying and in dealing with local User Groups is much appreciated. I also need to thank Keith Chamberlain who keeps the database in order, prints all the address labels, and duplicates the AppleXtras disks. Keith has been helping Apple2000 for many years now.

Dave Ward is another who needs special mention. Dave runs the Apple II Hotline and fields all those awkward questions that you all seem to come up with. Judging by the number of puzzled letters I get, many of you do not seem to realise that Dave is sitting at the end of the phone waiting to solve your problems!

Tony Dart who had been running the Hotline for some time, found that pressure of work within the expanding DTP industry meant he just could not continue to carry this task on. Our thanks to Tony for his help and also our thanks to John Arnold who took on the role of Macintosh Hotline coordinator at short notice.

During the year we were able to spread the various work loads of Apple2000 and as a result we no longer require the services of an administrator. I would like to thank Alison Davies for all the work she has done for Apple2000 over the years.

I would also like to thank Mike Davies, Alison's husband, for organising the workshops over the past year. The recent workshop at Bidmuthin was especially successful and brought together the Macintosh and Apple II sides of the group.

Finally, I must thank all those who helped us on the Apple2000 stand at both the MacUser and the MacWorld Shows. It was during the MacUser Show that Apple2000, née BASUG, celebrated its tenth birthday. We opened a bottle of champagne and ate a delicious cake that Mike Dawson baked for us. Thanks Mike, though I did not realise that HyperCard stacks could be baked in three dimensions and round! We decided to mark the first ten years of the groups history with a special souvenir booklet. This was sent out with the November mailing and will have brought many a memory back to those who have been with the Apple over the years.

Mentioning shows brings me to the various events we have organised over the year. As a national group, we just cannot meet in the way that we might like. The AGM is really the only event where we can all get together over the year. However we do hold workshops when we can at friendly dealers. The Bidmuthin workshop has become an annual event. We attend those shows we can, and had a very successful MacUser and MacWorld Show. These shows are important to be able to spread the word to new users. We gained many a new member by simply being able to answer their questions without a hard sell!

During the year we found that the membership of the Force was falling. The exorbitant prices that Telecom Gold charge, and the growing alternatives, helped in this process. There came a point where we felt it was impossible to keep it going. We still have many unpaid debts from some of the members Force accounts, and these debts helped make our minds up. Telecom Gold agreed to take on any existing accounts without any extra charges. Therefore from last November we no longer have the Force as one of our services.

Overlapping this process, we have been promoting Compuserve as an alternative data network. Compuserve is the largest online database in the world, and is accessible from the UK at very competitive prices. There is a large section devoted to Apple with vast download libraries. This brings me on to our own Bulletin Board TABBS. TABBS forges on regardless. Our regular callers span the whole world, and it is seldom sitting idle, day or night! Efforts have been made during the year to expand the system. The hard drives are full at present, and we hope that we might be able to

expand the storage without spending too much money. We have upgraded the modem during the year, and now offer full MNP error correction. We should be updating the software to the latest version soon and this will bring the new modem truly into its own and offer speeds up to 9600 baud!

May I remind you all that the magazine is filled with contributions from members. The reviews and articles are primarily written by you, the membership. If we do not get the material from you, we have to fill with whatever we can. Please write something and send it to us. Even if it is just a short description of how you use your computer. It will be of interest to someone. Those who would like to be added to the list of reviewers should contact Elizabeth Littlewood, the review coordinator.

There was one cloud on the horizon during the last year. A member who had approached us with a disk problem, inadvertently passed on to us a virus. The virus was relatively innocuous and was dealt with quite quickly. The learning experience in dealing with the problem was used as the basis of a letter to Slices. The member in question took exception to this and asked for an apology. This was given in the next magazine to be published. He continued to pursue the matter however and so Apple2000 decided to take legal advice. With the advice that we had done nothing wrong we resisted attempts to make us pay his legal costs. Finally he decided to sue us for libel. We took advice at this point from expert libel lawyers in London and finally he retracted the writ. The legal costs were considerable and are listed under 'Professional fees' in the accounts. It is a dangerous business being a publisher sometimes!

The big shake-up in the Apple community during the year was the sudden but not entirely unexpected launch of budget Macintosh computers. I have written quite a lot about the impact these might have on us all. We certainly saw signs at the MacWorld Show that there is a new breed of user now to consider. Things have started to change already. With a starter Macintosh and printer pack available for under a thousand pounds, price can no longer be given as a reason for not joining the Apple community. System 7.0 will be with us in a few weeks time. A pocketbook Mac is expected by the end of the year. The only thing I do not know is when Apple will launch the super IIgs! Help spread the word about Apple2000, contribute to the largest Apple User Group in the UK, and we shall grow even stronger.

3. The Secretary's Report from Norah Arnold

The Committee as elected at the AGM in 1990 was Ewen as Chairman, Irene as Treasurer, myself as Secretary and John Lee, Elizabeth Littlewood and John Arnold were elected as Committee members. I am pleased to say that the membership of the Committee has stayed the same for the whole year. Also the commitment shown by the members of the Committee has stayed as high as ever and attendance at Committee meetings has been excellent. I would like to point out that attending meetings means giving up a whole day at the weekend now and again because of the travelling and preparation involved.

I would like to thank Irene and Ewen for the high level of their commitment and also thank Elizabeth for the help she has given with reviews. I would also like to give my personal thanks to those who have helped by sending in reviews and articles, often about software which they have purchased themselves, and I mention Mike Dawson, Peter Kemp, Ceri Fisher, Geoff Wood and John Kishimoto particularly here.

As you may have noticed, the Macintosh Hotline number has changed. Many thanks to Tony Dart who helped on this front for a considerable time. My husband, John Arnold, has taken on the Hotline job and I can now say from personal experience that what other Hotline people have said is true. You can get several very quiet evenings with hardly any calls at all, then you will get an evening when it seems that almost every Macintosh member has a problem!

As regards the Macintosh Library, good new Public domain software is harder to come by. We are getting mainly updated versions of old and trusted favourites. The number of offerings to the Library from members has fallen off. If you do have a good piece of public domain software that you haven't seen mentioned on the Library pages, send it in and I will be happy to return your disk with your choice of Library PD on it.

We have had to make some hard decisions this year, mainly financial ones concerning the support that was previously given by Alison Davies and also concerning the Force and the expansion of TABBS. Although we regretted having to take them, these decisions have been taken without any dissent.

I would particularly like to thank Keith Chamberlain for his loyal support and help with both the membership database and the Force database.

4. Treasurer's Report from Irene Flaxman

There was an operating deficit in the year, which we aim to redress. There were a number of contributing factors — some of which were predicted, but others were unexpected.

The costs of printing increased by 8%, for the first time in a number of years. The costs of postage increase each year, but we have also lost the facility for claiming a discount on the bulk mailing of magazines and newsletters. These two increases in costs, plus the legal fees and the costs of consumables used in-house approximately equate to the amount of the deficit.

We had foreseen that the year-end would see this trend, therefore a proposal was put before last year's A.G.M. that the membership subscription rates should be increased. This was the first increase in subscriptions for about five years, and it took effect from 1st November 1990.

H.M. Customs & Excise decided it was time to inspect our records at the end of 1990. The Inspector was generally happy with our records, and with our application of the tax. However, an assessment for unpaid tax was raised because we had not realised that the subscriptions paid by overseas members are taxable. The proportion of our subscription which is subject to tax has been increased, and the recent increase in the VAT rate has further reduced the amount of the subscription

retained by the Group.

Looking at a few items in detail, the main sources of income are "magazine income" and "sales to members". The former comprises of members' subscriptions and advertising revenue. Subscriptions have increased, indicating an increase in the number of members — this provides the largest contribution towards our running costs. The advertising revenue decreased, reflecting a general trend as companies are trying to cut their costs.

The reduction in expenses attributed to the magazine is a little misleading — the whole of the printing costs in the preceding year had been attributed to this category, incorrectly.

Sales to members have increased in total, although sales of P.D. software has been relatively static and sales of Special Release software fell sharply. We are constantly seeking out new P.D. software, and this is becoming quite costly, but we have found little to add to the Special Release library for some time. The introduction of AppleXtras was popular with many members, so we are continuing this service.

We are slowly increasing our product range, which results in a higher stock valuation. We still maintain our policy of offering goods at competitive prices, providing a small contribution towards the running costs of the Group.

Usage of the FORCE reduced again. It still produced a slight surplus, but the continuing reduction in usage and the outstanding debtors gave cause for concern. We ceased to support the service as from 1st November 1990, having made arrangements for current users to transfer to a direct account with British Telecom.

Credit card charges have increased despite the fact that we negotiated a reduction in the rate. The increase in costs reflects the increased usage of this facility.

Some items of expenditure also invite comment. I've already mentioned the increases in printing and postage costs, earlier.

Audit fees have reduced slightly. We disputed last year's fee of £1700 and gained a reduction of £100, which was accounted for during the current year. Therefore, we paid £1600 for 1988/89, and the proposed fee for 1998/90 is £1500.

We have not paid for any advertising in magazines, due to the high cost and the low response. The figure shown under this heading relates to mailshots undertaken. However, promotional expenses have increased — these include "free" gifts to members, costs of attending trade shows, and promotional items given away at trade shows.

Telephone costs have been reduced, due to concerted efforts by the committee.

Subscriptions have risen significantly. These include the British Association of Computer Clubs, and sources of P.D. software.

Bank charges have reduced, following the change of bankers.

The "consumables" figure represents in-house use of disks, cartridges, toners, etc. This is becoming more significant than previously, as we prepare more of our documentation in-house and as the libraries increase in size. In prior years, this cost has been retained within the stock purchases figure, but as these costs increase, it seems appropriate to show them separately.

We have generally managed to avoid high levels of bad debts, generally. However, our auditors felt it prudent to write off a debt of over £800 in 1988/89. I am pleased to report that we have subsequently recovered £500 of this debt, and this is reflected in the accounts for 1989/90.

The A.G.M. gives each of the officers a chance to thank those who have provided help during the year, and I should like to thank all members for their support — whether that is by sending in contributions to the magazine, helping with the hotlines etc., purchasing from Shop2000, or simply subscribing to the Group — all contributions are welcomed.

I'd also like to thank my fellow committee-members for all their support during the year, and Keith Chamberlain for his help in maintaining the membership database, coping with AppleXtras and invoicing the FORCE users. Finally, I must thank my husband for his patience and his help.

5. Adoption of the Accounts

Ron Thompson proposed the adoption of the accounts and June Savage seconded. The accounts were accepted unanimously.

Brian Savage asked whether we were operating a charity and was it possible that Apple2000 would meet the criteria to be classed as a charity. Ewen said that this had been considered on a previous occasion but that the Committee would look into the matter again.

June Savage asked a question regarding the membership database.

6. Election of Officers

Norah Arnold said that twelve members were represented by proxy, four in the name of Ewen Wannop and eight in the name of Norah Arnold.

One nomination had been received for Chairman in the name of Ewen Wannop.

One nomination had been received for Secretary in the name of Norah Arnold.

One nomination had been received for Treasurer in the name of Irene Flaxman.

Nominations for Committee Members had been received in the names of John Lee, John Arnold, and Elizabeth Littlewood.

Peter Kemp proposed that all the nominations be accepted and this was seconded by Colin Holgate. The proposal was accepted unanimously.

Bryn Jones said that he would like to propose a vote of thanks to the Committee and others who had helped, for all they had done in the past year.

7. Any Other Business

Irene Flaxman said that the Committee were always looking for people to help as 'experts' for the Hotline. She asked that any member who felt that they had a particular expertise in an area or in an application would volunteer to answer queries that came into the Hotline.

Elizabeth Littlewood pointed out that she had extended her role to cover Macintosh reviews as well as Apple II reviews. Elizabeth extended an invitation to members to contribute to the magazine.

The meeting closed at 12.15 p.m.

The Committee would like to thank all members who attended the AGM or who participated by sending in their proxy.

Software Registration — Is It Worth It ?

A list of experiences

By Mike Dawson

Over the past years an argument has raged over the merits of registration of software. I felt that for the price of a stamp it was worth the effort as the potential gain should be significant given the amount of upgrades flying around. In the following paragraphs I shall relate my experiences with some of the software I have bought and registered over the past couple of years.

I would like to state that I have no commercial connection or interest in any of the following products. They are mentioned only because I have bought, used and registered them.

Nisus

(Published by Paragon Concepts Inc, California, USA.)

Wordprocessor

I have had this programme about 6 months and was therefore not expecting an upgrade so soon. Out of the blue I received a single floppy disc and a very brief note explaining the contents of the disc. All documentation regarding the upgrade and the method of undertaking the upgrade were contained in Nisus documents. Paragon concepts does not have a distributor in this country as such and therefore the upgrade came from a company called MacSoft which through whom Nisus was registered in this country. This upgrade was what I call a maintenance update. A series of fixes and minor improvements. This upgrade was both unsolicited and most important, free.

The method of updating the Wordprocessor was a novel one which is worth relating. A full working copy was not included on the disc but an updating programme with data files. Instructions given in the text files was clear and covered two versions of Nisus and told you how to update the particular version of Nisus used. The update programme uses the data to directly modify the Nisus files held on the hard disc. This means that Paragon concepts do not have to distribute full working copies thus saving discs and ensuring only the registered user in possession of the wordprocessor can benefit from the upgrade.

Redux

(Published by Microseeds of Florida, USA.)

Hard Disk Backup Programme

Since buying and using Redux to backup my internal hard disc there has been one maintenance upgrade. This was notified by letter from the States giving three options for obtaining the upgrade. These were to either :

(1) Return the original Redux Floppy disc for a free update by return of post

(2) Dial up the States to their own bulletin board twice. Once to log on to the board and ask for access authorisation and the second to go in and download the new version. Not very feasible from England especially as I only had a 1200 baud modem at the time.

(3) To send Microseeds the enclosed form and 10 US dollars to receive a new master disc. This fortunately coincided with a business trip to the USA I was therefore able to send in a money order purchased from the US post office. When I returned home some seven weeks later the new version was waiting for me. Luckily the Customs and Excise did not pick up on it and so that was the limit of my costs. The documentation of the upgrade consisted of some short notes on a piece of paper and not in a text file on the disc. These notes were brief befitting a maintenance upgrade. Since then I have received a newsletter from Microseeds which consisted of a folded A3 size sheet of paper containing tips on how to use Microseeds products as well as a sales pitch for their new commercial virus detection programme.

DiskExpress™ & MultiDisk™

(Published by Alsoft Inc., Texas, USA)

Hard Disk Optimization / Partitioning

Even whilst I was writing this article the postman was bringing more offers of software updates. This one has proved to be the first of the new System 7.0 upgrades. This upgrade was the first one I've received that actually has a cost attached to it. I suspect that with some of the much vaunted new facilities of System 7.0 that upgrades will become the new fashion. The cost of this upgrade to is $10 per item (DiskExpress™ & MultiDisk™) plus $4 handling and $10 post and packing. There is an additional cost of $10 for overseas posting (i.e. over the pond). This makes a grand total of US $44 for the upgrade of both pieces of software. I have sent off for this upgrade as I intend to upgrade to System 7 (I'm a glutton for punishment). However at the time of writing I had not received my upgrade (2 to 4 week delivery) so I cannot report just how different it is from the version currently on sale. The upgrade offer also includes a 'free' US $10 voucher against future upgrades. I may be a cynic but perhaps there will prove to be further revisions necessary in the stormy waters ahead in System 7.0.

As a consolation to those people who have bought either or both packages recently Alsoft will upgrade your DiskExpress™ or MultiDisk™ for free upon proof of purchase and sale date as long as you bought it after April 1st 1991.

Wingz
(Published by Informix)
Spreadsheet

Shortly after purchasing Wingz and registering I read in MacUser of a new release to version 1.1 (I had bought version 1.0). The article said that the upgrade would be available 'at Christmas' (1989). So I thought I would wait until after the Christmas Holidays before trying to pester Informix into giving me the upgrade. However I reckoned not without the efficiency of their organisation as on Christmas Eve the Royal Mail dropped a package onto my door mat. This was the upgrade in four discs, two for the Mac II and two for the rest of the Mac range. This had come just because I was a registered user and not because I prompted them at all. The story does not end there however. In February of this year a mystery package dropped onto my doormat. Mystified I opened it hoping that I had not told too many Irish jokes recently only to find another Wingz upgrade. The accompanying letter explained was a minor revision which takes Wingz to version 1.1a. This upgrade was free just like the earlier one. I give full marks to Informix on their user support.

Mission Starlight & Skyshadow
(Published by Cassidy & Greene)
Arcade Games

I have two games by these masters of the colour Mac II games, namely Mission Starlight and Sky Shadow. Surprisingly both these games had registration cards which I duly sent off (all the way to the States) but I have not been notified of any upgrades so I suspect that none are required. However if the lads at Cassidy & Greene are reading this then I would like you to know that Apple's MacroMaker utility makes both of your games lock up !.

Super Music Studio
(Published by Bogas Productions)
Music Authoring and Playing Programme

Since I bought and registered this excellent music programme I have received a couple of sales pitches for their add on music song discs and an introductory offer of a Midi sequencer programme which I did not take up. No upgrade though and as the programme operates faultlessly I don't expect one until the whole programme is overhauled. However as I have received these offers it does demonstrate that the publisher is taking notice of their UK customers.

I do have other hardware/software which I have registered but I either have had these a short time and an upgrade is not out or I have not heard anything at all. This does not mean of course that they have forgotten me. It could be that a revision or upgrade is not available yet.

Conclusion

I would whole heartedly recommend registration of both software and hardware. At worse all you can lose is the cost of a postage stamp and at best gain some free upgrades on maintenance revisions and a cheaper upgrade on full featured rewritten versions. It would seem that the software houses are getting their act together and giving the support that we users pay for in high prices.

M3 CD-ROM set
PD software for the Mac

A review of one of the CD-ROMs available for Public Domain addicts

by Peter Kemp

Ten years ago I bought my first disk drive. Attached to my Apple II it gave me 128K of space on a 5.25 diskette (DOS 3.3 had just come out). Two and a half years ago, when I moved to a Mac Plus, I got 800K on a 3.5 inch floppy. An external Qisk gave me a staggering 20Mb and I thought I was set for life.

About three months ago I bought an Apple CD-ROM drive as I wanted to explore the increasing amount of material available in this format. Just over a month ago I ordered a two CD-ROM set from Mac's Place in the US (details at the end of the article). It set me back $88 or £82, allowing for air mail, insurance, VAT and import duty. In the last four weeks, I've been taking a look through it.

The statistics are staggering. Between them the two discs contain over 1.1Gb. That's right - over a thousand megabytes of public domain shareware, freeware, beerware, smileware, postcardware and who-knows-what-ware for the Macintosh.

The first disk (around 19,000 files totalling 650Mb) contains, among other folders:

Art - 5,406 files (159Mb)
Art Utilities - 288 file (6.5Mb)
Documentation - 530 files(16Mb)
Education - 614 files (12Mb)
Entertainment - 1595 files (54Mb)
Mac II - 80 files (3Mb)
System Folder Additions - 380 files (17Mb)
Utilities - 1088 files (18Mb)
Word Processing Applications - 253 files (8Mb)

The disk itself is organised as one huge HFS volume and navigating it can be tricky. (I sometimes get very frustrated trying to find my way back to a favourite application or picture! The compilers have done their best to categorise material into subjects, but it's still a bit of a nightmare.)

I strongly suggest using MultiFinder when opening applications, as this avoids the need to re-read the volume from the CD drive when returning to the desktop. (CD drives aren't renowned for their speed and on this volume, it can take 10/15 seconds.)

The second disk (around 9,000 files) is mainly devoted to HyperCard stacks. They cover everything from several translations of the Bible (with navigators) through to an Esperanto tutor, by way of a guided tour of Boston. A HyperCard interface is provided, which takes the user down through the myriad of levels of folders down to the applications themselves.

"Never mind the quantity - what about the quality?". As you might expect, it's variable. Not surprisingly, there are few "professional" applications, although Boomerang 2.0 and Easy Envelopes Plus 2.02 are there, together with over 95 LaserWriter fonts, well over 100 ImageWriter fonts and 500Kb of SCSI tools. The sheer volume and range of art work is quite staggering and I'm now able to have all the Technical Notes (up to June 1990) online. The NASA picture of Ed Aldrin is almost worth the price of admission by itself and I defy anyone not to find at least one CDEV or INIT (out of over 300) to drop into their system folder .

On the down side, there is some rubbish - of course there is. I've found one corrupt file (i.e. it didn't copy using Finder) and one or two GIF files which don't unpack properly, but otherwise no problems. These failures apart, the editors have done a valiant job in trying to ensure everything works, but much of the stuff written in the pre-HFS days doesn't take very kindly to more modern machines. Even some of the more recent stuff hasn't used the information available from SysEnvirons to check for a maths co-processor, 32 bit Quickdraw, keyboard type and so forth. But I'm quibbling - even 50Mb of rubbish is still less than 5% of the total available!

There is something for everyone in this set - and at the asking price, it's a steal. If you've got a CD-ROM player then log on to Compuserve and order it now. You certainly can't borrow my disks, since I'll be using them for a long time to come, but one day I'll lend them to Ewen to pull off some of the items for TABBS. You'll have to wait, though.

Available from: Mac's Place
(0101) 206-883-8312 (Voice)
(0101) 206-881-3090 (Fax)
76635,660 (Compuserve - handy to check stock position.)

StoryEditor and OverMatter

Ewen Wannop reviews two extensions for Xpress 3.0 from The Last Word

Apple2000 was offered for review these two extensions for Xpress 3.0 by the publishers Last Word. Thy do work, sort of, but before you consider buying them, check out my conclusions at the end of this article.

The Macintosh is unique amongst computers in having a toolbox of basic utilities that are available to the programmer. A good programmer will use these toolbox routines to construct simple and elegant programs. One of the most powerful tools available is the TextEdit tool. This handles all the basic tasks of displaying, scrolling and handling all edit commands within a TextEdit record. To make an Editing window all that is needed is to create a window with a TextEdit control. By placing the target text into this control as a TextEdit record you can create a mini word processor very easily.

Quark Xpress 3.0 also has a powerful feature that allows extensions in its boot folder to be automatically loaded as Xpress is started up. There are some extensions or rather 'Xtensions' provided with Xpress and others are available as Public Domain or Shareware. StoryEditor and Overmatter are two extensions that are automatically installed as Xpress is started up. They are individually numbered with the serial number of your copy of Xpress so they will only work with that copy of Xpress. It is easy to install the extensions, just drag them into the Xpress folder.

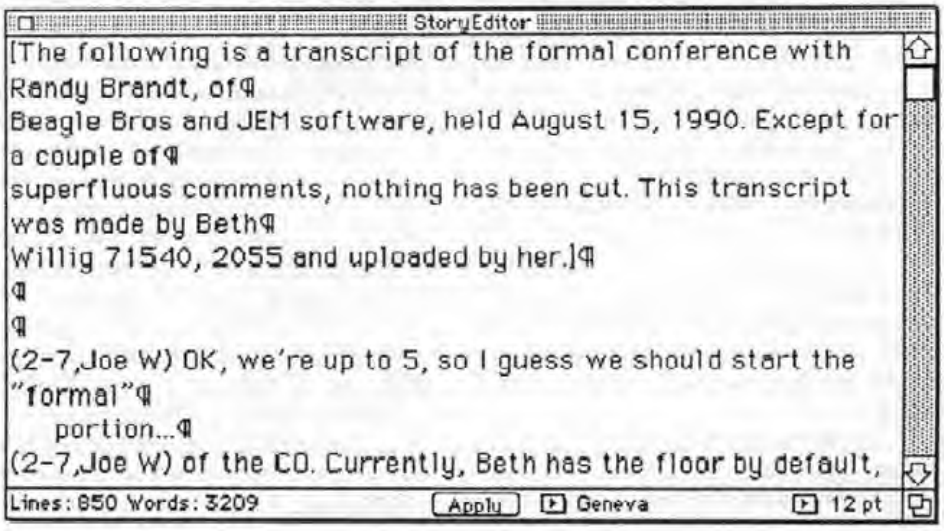
Both the extensions have the same format, when opened they display a standard window which can be sized and moved as needed (see Figure 1 and 2). The text is displayed in a single font which can be changed if required. It is noted in the press pack that StoryEditor in its final version (we only had a Beta one) will support all typographical attributes and Style Sheets. I was unable to see these working or how many attributes would be supported in the final version.

Overmatter

When you have placed more text than can be shown into a text box in Xpress, a marker at the bottom right shows that you have extra undisplayed text. Opening Overmatter shows you this overflow text and allows you to edit it. When you close the OverMatter window it will paste this text back into the current open text record. As this text is overflow, it creates pages as needed to place the text! I expected it to simply leave it as overflow material and was confused at first as to where all the overflow text had gone.

StoryEditor

With a story spanning many pages, and with text columns possibly interwoven with other stories, it is not easy to see and edit the whole story. StoryEditor allows you to see the whole of a single story in one window and scroll from top to bottom. Page breaks are shown where they occur. Closing the window pastes the edited story back to the original text record. This is similar to the Editor in PageMaker 4.0.



Common Features

You can choose the font and display size of the text in the OverMatter or StoryEditor window. Standard text attributes are displayed but not the fonts they were originally created in. Whether this will be changed in the final version of the StoryEditor module is a matter for conjecture.

The number of lines and words in the story is displayed at the foot of the window. This is helpful in keeping track of the text record.

You can edit, cut and paste and also apply standard keyboard shortcuts for text styles. The Xpress style menu is dimmed and so cannot be selected directly.

Normally invisible commands are displayed. This is helpful in showing line and page ends in a window which is of course probably not the same size as you may have been working with.

Bugs

In the press pack it mentions that the version of OverMatter we received was the final version. However it also mentions in the trouble shooting guide at the back of the manual that the system might crash if a text box or chain of text boxes contains anchored text or picture boxes. They will offer a free upgrade to owners when the problem is solved. I managed to crash OverMatter frequently with nothing more than a simple story in the box!

Conclusions

The StoryEditor extension works after a fashion.

The OverMatter extension works, but with constant crashing and the insertion of pages when you least expect it, is worse than useless.

If StoryEditor was issued as Shareware, I would pay $15 for the privilege of using it. However at a price of £295, even with a copy of the troubled OverMatter included, I can only wonder what on earth The Last Word are up to. Perhaps their company name tells all.

Prices:
Overmatter £95
StoryEditor £295 (includes a copy of OverMatter)

The Last Word
Kiln House
210 New Kings Road
Fulham
London
SW6 4NZ
Tel: 071 736 7656
Fax: 071 731 7655

Ewen Wannop

Twenty-five Tips for Excel 2.2 Users

By Geoff Wood

Introduction
These notes are not intended for novices but for people who have some experience of using Excel. Some of the tips are covered in the manual but many people do not read the manual and those who do read it can't remember all they have read. Other tips are based on my experience or on reading various books and articles on Excel.

1. Suppressing the Status Bar
Normally, Excel displays the Status bar across the bottom of the screen, displaying the word Ready or Enter or a brief explanation of a Command. If you don't need this information, you can suppress the Status bar by using the Workspace command in the Options menu. The screen then displays another row or two of your worksheet.

2. Using the Zoom Box
After you use the Zoom box (in the top right corner of the window) to enlarge a window to fill the screen, the Excel program does not record this fact when you save the file. So when you open the file again, the window is the same size as it was before you enlarged it with the Zoom box. If you want your worksheet to fill the screen when you open the file, you must use the Size box (in the bottom right corner of the window) to adjust the size of the window before saving the file.

3. Opening several files from one command
With older versions of Excel, if you wanted to open several files from one command, you had to do it in Finder or MultiFinder. Excel 2.2 offers the Save Workspace command in the File menu which allows you to save several files under a collective file name (default name Resume). Workspace files remember not only the size and position of the windows you saved but also such features as the preferred chart type, the global calculations setting, the Full or Short menus setting, the Info window settings and the options in the Options Workspace command.

4. Selecting a block of cells
You can select a block of cells by dragging from the active cell in any corner of the block to the cell in the corner diagonally opposite. A quicker, easier way is to select the cell in one corner, hold down the shift key, then select the cell in the opposite corner. This method is especially useful when the opposite corner is not already displayed in the window; you can click in the scroll bars or arrows to bring it into view.

If you know the coordinates of the cell diagonally opposite the active cell, you can use the Goto command in the Formula menu (or Command-G). Enter the cell coordinates in the Goto dialog box, hold down the Shift key, then click on the OK button.

If bottom right hand corner of the block is the last cell of the worksheet, you can first select the upper left cell of the block, hold down the shift key, then use the Select Special command in the Formula menu to select the last cell.

You can also select a block of cells without using the mouse. Just hold down the shift key and use the appropriate arrow keys to enlarge or reduce the size of the block.

As you select a block of cells, the numbers of rows and columns you have selected are displayed at the left of the Formula Bar until you release the mouse button or shift key.

Command-Spacebar selects the current column. Shift-Spacebar selects the current row. Having selected a column or row, you can extend the selection to include adjacent columns or rows by holding down the shift key and using the appropriate arrow key.

Command-Option-* selects the whole of the current data block, i.e., a block of cells bordered by a blank row and a blank column. This can be useful for formatting.

5. Selecting non-contiguous cells
You can select two or more cells that do not touch one another by holding down the Command key before clicking on the second and subsequent cells or before dragging over blocks of cells. However, if you select a cell or block that you did not really want to include in the multiple selection, there is no way to de-select the unwanted cells. You must start the multiple selection process again from the beginning.

Multiple selections are very useful for formatting. For example, if you want to shade alternate rows of a worksheet, you can select alternate rows with the Command key held down, then format all of them at the same time with the Format Border command.

6. Moving a range of selected cells
Once you have selected a block or multiple range of cells, you can move the entire range across the worksheet by holding down the Command key and pressing the Tab key. You can move the selection down the worksheet by holding down the Command key and pressing the Return key. To move the range to the left or upwards, hold down both the Shift and the Command keys before using the Tab or Return keys.
This technique is especially useful for editing successive rows or columns in a table of cells. You can

select and edit one row or column, then move the selection to the next row or column without having to use the mouse.

7. Moving within a range of selected cells

After selecting a block of cells or a multiple range of cells, you can move from one cell to another by using the Tab key, or the Enter or Return key. Excel remembers the sequence in which you selected the cells and/or blocks and moves from one cell to the next in the same sequence. To move in reverse sequence, hold down the Shift key before pressing the Tab, Enter or Return key.

8. Defining names for constants

Most Excel users who have progressed beyond the novice stage know that you can assign a name to a cell or a block or a multiple range of cells, then use that name in formulas or with the Goto command. But many are not aware that you can assign a name to a value which need not appear in a cell. For example, you could put the name VatRate in the Name field of the Define Name command dialog box then type 15% in the Refers To field. You could then use the name VatRate in formulas.

9. Applying names

When developing a worksheet, you may prefer to use cell references in formulas rather than names until you are satisfied that the design of the worksheet is correct. If you then decide to assign names to some of the cells, the Apply Names command can be used to automatically replace the cell references in formulas with the names.

10. Pasting names

In the Paste Names command there is the Paste List option which creates a list of all the Names in your worksheet and the cells assigned to each name. Of course, you can use the Define Names command or the Goto command to identify the cells assigned to each Name but the Paste List command provides a record on the worksheet itself.

11. Changing formulas to values

To convert all or part of a formula into a value, select the cell references in the Formula Bar, then use the Calculate Now command in the Options menu. To convert formulas in several cells into values, select the cells and use the Copy command, then, with the cells still selected, use the Paste Special command and choose the Values option.

12. Using number formats

Number formats such as 0 which rounds to the nearest integer and 0.00 which rounds to two decimal places affect only the display; calculations are based on the underlying number, so the displayed answers may appear to be incorrect. To ensure that the answers correspond to the displayed numbers you may need to use the ROUND function.

12. Formatting numbers automatically

If you type a £ sign at the start of a number before entering it into a cell, Excel assumes that you want the number to be displayed with the standard format for British currency. If you type a decimal point with or without the number of pence, Excel displays the pence as well as the pounds. If you include commas to distinguish the thousands and millions, Excel uses the corresponding standard format.

If you type a % sign at the end of a number, Excel displays it with the percent sign and divides the number by 100 for calculation purposes. Similarly, Excel recognises dates and times if they are typed in one of the standard formats such as 9/1/91 and 10:45 am.

13. Developing your own number formats

You can format numbers almost any way you like. For example, #,##0 "mm" displays mm after the number and inserts commas if necessary. The # sign tells Excel not to display leading zeros. (The format 0.000 would display the number 999 as 0.999.)

Excel number formats consist of up to four parts separated by semi-colons. The semi-colons ☛

Excel Standard Formats

Format	Positive	Zero	Negative	Keyboard
General	12345.6789	0	-12345.6789	⌘-Opt-~
0	12346	0	-12346	
0.00	12,345.68	0.00	-12,345.68	⌘-Opt-!
#,##0	12,346	0	-12,346	
#,##0.00	12,345.68	0.00	-12,345.68	
£#,##0 ;(£#,##0)	£12,346	£0	(£12,346)	
£#,##0 ;[Red](£#,##0)	£12,346	£0	(£12,346)	
£#,##0.00 ;(£#,##0.00)	£12,345.68	£0.00	(£12,345.68)	⌘-Opt-£ or $
£#,##0.00 ;[Red](£#,##0.00)	£12,345.68	£0.00	(£12,345.68)	
0%	1234568%	0%	-1234568%	⌘-Opt-%
0.00%	1234567.89%	0.00%	-1234567.89%	
0.00E+00	1.23E+04	0.00E+00	-1.23E+04	⌘-Opt-^
d/m/y	19/10/37	1/1/04	-19/10/37	
d-mmm-yy	19-Oct-37	1-Jan-04	-19-Oct-37	⌘-Opt-& or 3
d-mmm	19-Oct	1-Jan	-19-Oct	
mmm-yy	Oct-37	Jan-04	-Oct-37	
h:mm AM/PM	4:17 PM	12:00 AM	-4:17 PM	⌘-Opt-@
h:mm:ss AM/PM	4:17:37 PM	12:00:00 AM	-4:17:37 PM	
h:mm	16:17	0:00	-16:17	
h:mm:ss	16:17:37	0:00:00	-16:17:37	
d/m/y h:mm	19/10/37 16:17	1/1/04 0:00	-19/10/37 16:17	

£#,##0.00" Credit";£#,##0.00" Debit";"Nil";@ "overdue, please pay promptly."

Entry	Display
1234.56	£1,234.56 Credit
-1234.56	£1,234.56 Debit
0	Nil
Three months	Three months overdue, please pay

distinguish the positive, negative, zero and text formats. The latter must include the @ symbol. Thus the following format would display numbers as shown in the box above.

If you don't define a format after a semi-colon, Excel hides the number from view. Thus 0.00;(0.00); displays positive and negative numbers but hides zeros from view. You can suppress all the zeros in a worksheet with the Display command in the Options menu. If you want to hide some but not all zeros you can do it with special formats.

You can cause consternation by formatting cells in a colleague's worksheet with the special format ;;; which hides all numbers and text from view but does not affect the calculations based on the hidden numbers. To restore the display, simply reformat the cells with the original format.

14. Formatting with keyboard shortcuts

Some of Excel's standard formats can be assigned from the keyboard rather than from the Format menu. For example, Command-Option-! assigns the 0.00 format and Command-Option-& assigns the d-mmm-yy format. (See the diagram for a list of standard formats and shortcuts.)

You can also assign borders from the keyboard. Command-Option-Arrow puts a border at the top, bottom, right or left of the cell depending on which of the four arrow keys you use. Command-Option-Zero puts an outline border round the selected cells. (Why did Microsoft use Zero rather than O for Outline?) The Command-Option-Arrow keys also toggle to erase an existing border but the Command-Option-Zero combination does not erase an outline border.

You can also format or de-format characters in Bold, Italic, Strikethrough, Underline, Outline or Shadow by using Shift-Command-B, I, -, U, D or W.

Unfortunately, there are no keyboard shortcuts for formatting alignment (general, left, centre, right and fill), nor for cell protection. But if you have already specified an alignment or cell protection in one or more cells, you can use the Repeat command in the Edit menu (or Command-Y) to repeat the alignment or cell protection in other cells.

Alternatively, you can create a short macro for formatting alignment, protection, etc and use keyboard shortcuts such as Command-Option-C for Centre, etc. If you rename the macro sheet as Excel Startup and put it in your System Folder, it will be opened automatically whenever you start up Excel.

15. Adjusting column widths and row heights

You can adjust the width of several columns simultaneously by selecting them (using the Command key if they are not adjacent columns) then dragging the right hand edge of any of the column headers. As you drag, the width of that column in displayed in the cell reference box at the left hand side of the formula bar so you can specify a precise number of characters. Of course, you could use the Column Width command in the Format menu but the dragging method lets you to see the new width as you drag.

Similarly, the height of several rows can be adjusted by selecting them and then dragging the bottom of one of the row headers. Again, the row height (in points) is shown in the cell reference box at the left hand side of the Formula Bar.

16. Checking column widths and row heights

The quickest way to check the width of a column is to place the pointer over the right hand edge of the column header and hold down the mouse button. The width is then displayed in the cell reference box at the left hand edge of the Formula Bar. Of course, you could use the Column Width command in the Format menu to display the number of characters but this method takes longer.

Similarly, you can check the height of a row by placing the pointer over the bottom edge of the row header and holding down the mouse button to display the row height in the cell reference box at the left hand edge of the Formula Bar. Again, this is quicker than using the Row Height command.

17. Hiding columns and rows

You can hide a column or row from view by specifying a width or height of zero with the Column Width or Row Height commands in the Format menu or by dragging the left hand edge of the column header or bottom edge of the row header until the number zero is displayed in the cell reference box at the left hand side of the Formula Bar.

To re-display a hidden column, place the pointer in the head of the column that is just to the right of the hidden column, then drag to the right. To re-display a hidden row, place the pointer in the head of the row immediately below the hidden row, then drag down. To re-display several hidden columns or rows, select the columns on each side of the hidden columns or the rows above and below the hidden rows then use the Column Width or Row Height commands to assign a width or height greater than zero.

18. Changing fonts

You can change the standard font for a worksheet with the Standard Font command in the Options menu but if you format or have already formatted some cells with the Font command in the Format menu, these cell formats override the Standard Font.

The default font for a new worksheet in Excel is Geneva 10 point but you can't change the program to make new worksheets start up with a font of your choice. Geneva is fine for the ImageWriter but not so good for LaserWriters which automatically substitute

Helvetica for Geneva unless you specify otherwise. If you use a LaserWriter or a HP DeskWriter you may prefer to change the standard font of each new worksheet to Helvetica which displays more characters across the width of the screen than Geneva. Better still, you could write a short macro to open a new worksheet and set the standard font to Helvetica. Then add that macro to the Excel Startup file recommended in tip 14.

The row numbers and column letters are always shown in the standard font (in bold).

19. Displaying formulas

You can use the Display command in the Options menu to display formulas but a quicker way is to use the keyboard shortcut, Command-'. Excel automatically doubles the width of every column when it displays formulas but you may have to widen some of the columns to display the full formula.

20. Entering pounds and pence figures

If you need to enter pounds and pence figures in many cells you can use the Workspace command in the Options menu to specify 2 decimals in the Fixed Decimal option. Then, when you enter numbers, you don't need to type a decimal point between the pounds and the pence.

21. Cut, Copy and Paste in the Formula Bar

You can use the Cut, Copy, Paste and Clear commands to edit entries in the formula bar. Thus you can cut or copy cell references from a formula in one cell and paste them into a formula in another cell.

After cutting or copying from the Formula Bar, you must press Enter or Return (or click on the tick or the cross) before attempting to paste the cut or copied entries into another cell. If you click on another cell (or use the arrow keys to move to another cell) before doing this, the characters you have selected for cutting or copying will be replaced by the coordinates of the new active cell.

Normally, when you cut or copy a cell and paste into another cell, Excel changes any cell references on a relative basis (unless they are absolute references denoted by $ signs). However, if you cut or copy the contents of the Formula Bar, then press Enter and paste them into another cell, the original cell references are retained.

22. Using the Paste Special command

The Paste Special command in the Edit menu works only with the Copy command, not with the Cut command. It enables you to paste only the formulas (without formats) or only the values or the formats or notes.

It also enables you to add or subtract the contents of the incoming cell(s) to or from the contents of the recipient cell or to multiply or divide the contents of the recipient cells by the contents of the incoming cells. There is an option to skip blank cells to avoid copying the contents of blank cells into cells already containing entries.

23. Transposing columns and rows

You may put hours of work into designing a worksheet and then realise that it would have been better the other way round. The Paste Special command offers a Transpose option which puts the contents of the copied columns into the rows of the recipient range. It transposes all cell references (whether relative or absolute) on a relative basis but Named cells in the copied cells remain unchanged so any formulas in the pasted area containing names still refer to the original cells.

24. Fill Up and Fill Left

The Fill Down and Fill Right commands are very useful but many people do not realise that if you hold down the Shift key before selecting the command, the Edit menu displays Fill Up and Fill Left. You can use Command-D and Command-R for Fill Down and Fill Right, but there are no keyboard shortcuts for Fill Up and Fill Left.

25. Using the Series command

With other spreadsheet programs it can be quite a chore to type a series of dates, such as the names of successive months or week endings, across the tops of the columns or in the first column of the rows. With Excel, it's easy. You just type the first date in the first cell, format it the way you want (for example, mmmm for the full name of the month) then choose the Series command in the Data menu.

The dialog box asks you to specify whether you want to go across the columns or down the rows (though if you have already selected a row or a column (or part row or column) it defaults to the appropriate option. You can also specify the Date Unit — Day, Weekday, Month or Year — and a step value or a stop value.

The Series command is not limited to inserting dates. You can start with a number and create a Linear series, where the step value is added successively to each cell, or a Growth series, where each successive cell is multiplied by the step value.

AppleXtras
Mac 9

CClock
CClock is a nifty little program which displays a digital or analog clock in a window on the Mac. It is Multifinder compatible so it can be run in the background while you work on other programs. It can be resized and repositioned anywhere on the Mac Desktop and will remember where you put it every time it is run. For multiple monitor Mac's you can place CClock in any monitor display. CClock will allow you to set up to 50 alarms for any time up to the year 2079. CClock also allows you to select a Chime to sound on the Hour and/or Half-hour. The sounds are chosen from among the 'snd ' resources in your System file. Again, CClock remembers which sounds you selected. You can select the Font to be used for the display. You can also launch other applications from CClock and create a menu of applications to be launched at any time under Multifinder.
New Features
•Easier editing of alarm times now allowed in dialog boxes.
•The user can now assign command key equivalents to applications in the Launch Menu.
•A new analog clock display option has been added.

Solitaire.1.1
Written by Steve Boyd of Universal Imaging Corp., 502 Brandywine Parkway, West Chester, PA 19380.
This is just the program for you if you like to play cards. It has six versions of Solitaire and has great colour for those people who are lucky enough have colour machines. Solitaire is freeware with some restrictions.

FlipIt
Written by Kevin Clark of 8049 Janes #E, Woodridge, IL 60517
This is a good board game having several levels. It is very easy to learn and will give you a hard game at the advanced level.

Duck Hunt
A game for those who have a love-hate relationship with their computer games. Don't let it send you crazy. (Picture on facing page.)

Loodle 4.0.3
This is a shareware utility for making labels for 3.5 inch Mac disks. It is designed to print labels on standard sized label forms such as those used by the LaserWriter and other sheet feeders. Complete instructions for use are available in HELP under the OPTIONS menu. Basically all you do is pop the disk into the slot and Loodle will make up the labels.

TrueType™ Information stack
See page 45 of April's issue of Apple2000 for more details of this stack from Apple Computer Inc.

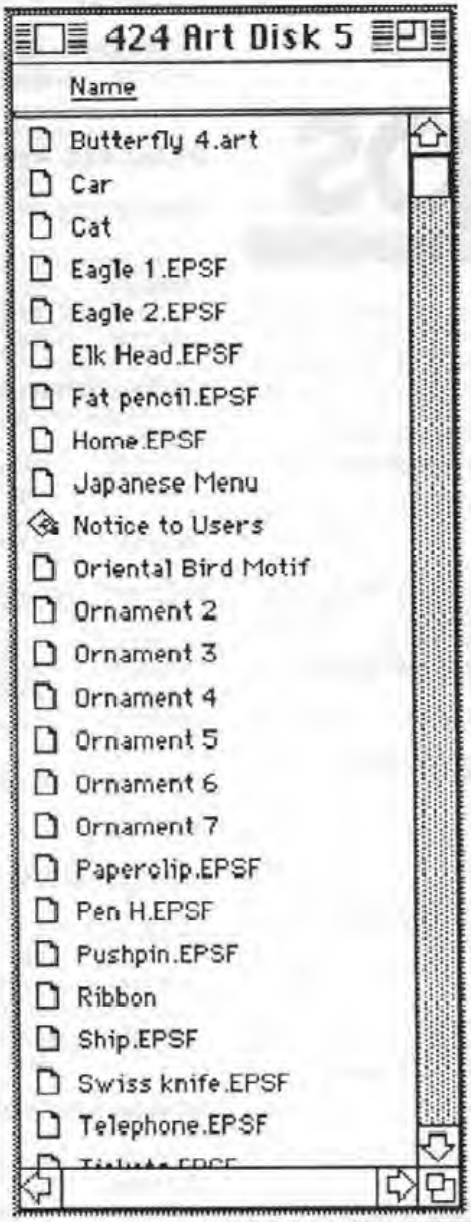
BootMan
Written by Bill Steinberg, CompuServe 76703,1027.
This program will do several things. The most useful and important thing Bootman will do is to allow the average Macintosh user to change the heap space of the System. If you are not sure what that means then you need to read more before you do it! The program has good on-line documentation that explains everything clearly and will certainly help if you are not sure what you are up to. Free with restrictions.

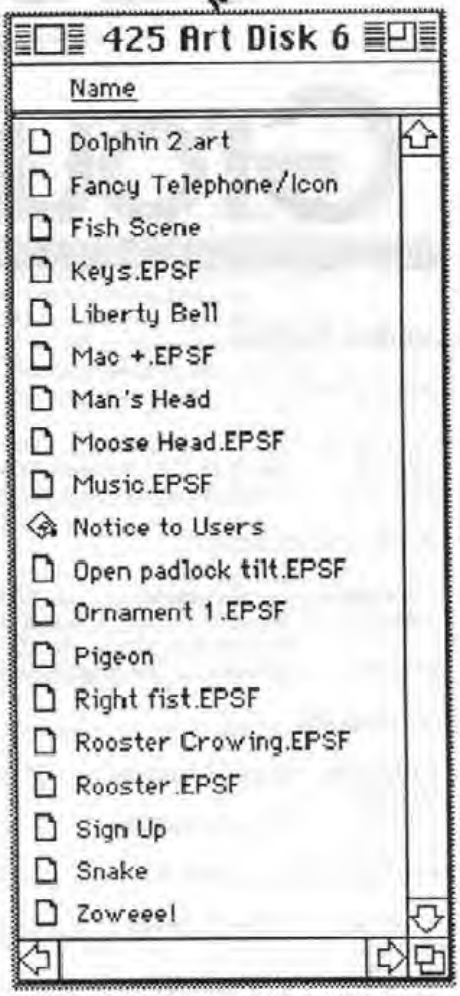
RoloDA 4.0+
Rolodesk DA is by Tim Endres of 8840 Main Street, Whitmore Lake, MI 48189.
Rolo DA is a desk accessory. It will allow you to have a quick rolodex of such items as names and addresses. Rolodesk DA is a very simple desk accessory designed to give you the features found in the famous Rolodex® product. A simple, fast access to brief cards of textual information. In the Rolodesk DA, these cards are presented to you in the DA's window, one card at a time. Rolodesk DA provides functions for adding and deleting cards, as well as searching cards for text. It is also fully integrated with the Macintosh environment, allowing you to move information to and from the cards and other Macintosh applications. You basically have the following functionality on each card in the Rolodesk.
•Full Macintosh Cut/Copy/Paste functionality on the text in both the card and find fields.
•Search facility for any text string. Case sensitive and non-case sensitive searches provided.
•Printing of card.
•Copy of card text to and from the clipboard and other applications.
•Setting of text font and size in the card on a file by file basis.
•Setting of card size on a file by file basis.
The last two features allow you to customize each Rolodesk file according to the data contained within.

Reader 1.04
Reader is written by Kevin Parichan
This program will allow you to read different file formats even if you do not have have the parent application. Reader will read MacPaint, PICT, Text and two kinds of sound formats. More formats are expected.

Mug Shot Lite™
Written by James K. Miles, MI Concepts, PO Box 8822, Kentwood MI, 49508. MugShot will take a snapshot of all the files and version numbers of what is in your System Folder. Some people's system folders become so large that they lose track of what is in them. Mug Shot is freeware with some restrictions.

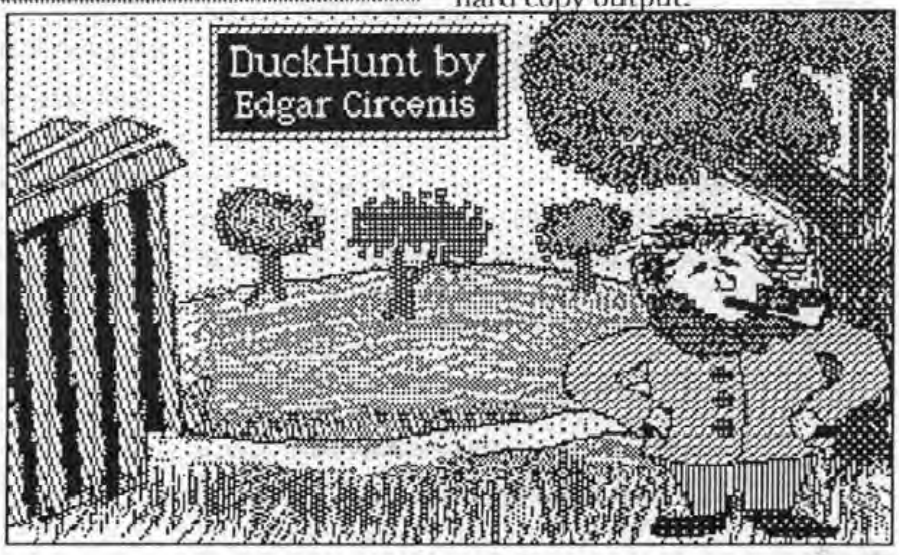
Mac Library





Disk 423, 424 and 425, Art Disks 4, 5 and 6.
These contain mainly Adobe Illustrator files in Encapsulated PostScript format for use with DTP or PostScript drawing programs. They need a PostScript printer for hard copy output.

Disk 426 Intro to System 7
This disk contains HyperCard stacks. The first stack is a complete introduction to System 7 written by Apple Computer. The other two stacks are on the subject of viruses.



User Groups

London Region

ESSEX GROUP

CONTACT - Pat Bermingham Tel : [illegible]
VENUE - The Y.M.C.A., Victoria Road, Chelmsford
MEETS - Third Friday of every month

HERTS & BEDS GROUP

CONTACT - Norah Arnold Tel : [illegible]
VENUE - The Old School, 1, Branch Road, Park Street Village, St Albans, Herts.
MEETS - 8.00pm on the first Tuesday of each month

KENT GROUP

CONTACT - Richard Daniels Tel : [illegible]
VENUE -
MEETS - Contact Richard

LONDON APPLE II GROUP

CONTACT - Chris Williams Tel : [illegible]
VENUE -
MEETS - Contact Chris

LONDON MACINTOSH GROUP

CONTACT - Maureen de Saxe Tel : [illegible]
VENUE -
MEETS - Contact Maureen

M25 BUSINESS MAC GROUP

CONTACT - Jim Panks Tel : [illegible]
VENUE - Sir Mark Collett Pavilion, Heaverham Road, Kemsing, Sevenoaks, Kent
MEETS - Phone Jim for details

SOUTH EAST ESSEX MAC GROUP

CONTACT - Mick Foy Tel : [illegible]
VENUE - D.P.S. Acorn House, Little Oaks, Basildon, Essex
MEETS - First Monday of each month

South

POOLE MACINTOSH USER GROUP

CONTACT - David Huckle Tel : [illegible]
VENUE - Deverill Computers (dealer)
Itec House, 34-40 West Street, Poole, Dorset BH15 1LA

SOUTHAMPTON

CONTACT - Geoff Parson Tel : [illegible] (work)
Tel : [illegible] (home)
VENUE - Contact Geoff for details

DORSET APPLE USER GROUP

CONTACT - Ron Hoare Tel : [illegible]
VENUE - Stuart Magnus & Co, Station Rd. Broadstone

Wales and West

BRISTOL GROUP (B.A.U.D)

CONTACT - Malcolm Ingsley Tel : [illegible]
VENUE - Decimal Business Machines
Three Queens Lane, Redcliffe
MEETS - first Wednesday of each month

HANTS & BERKS GROUP

CONTACT - Tel :
VENUE - Thames Valley Systems (Apple Dealer), 128 High Street, Maidenhead, Berkshire, SL6 1PT Tel 0628-25361
MEETS - 7.00pm on the second Monday of every month

MACTAFF - SOUTH WALES MAC GROUP

CONTACT -
VENUE - Apple Centre South Wales, Longcross Court 47 Newport Road, Cardiff
MEETS - Contact Apple Centre

Midlands

CAMBRIDGE APPLE USERS GROUP

CONTACT - Ian Archibald Tel : [illegible]
Mac Richard Boyd Tel : [illegible]
VENUE - Impington Village College, New Rd, Impington, Histon.
MEETS - Fortnightly during term time with both Mac and Apple II on deck each night.

EAST MIDLANDS MAC USER GROUP

CONTACT - David Nicholson Cole Tel : [illegible]
VENUE - School of Architecture, Univ. of Nottingham
MEETS - 1st and 3rd Tuesday of the month at 8 pm

GATEWAY COMPUTER CLUB

CONTACT - Vern Tel : [illegible]
Robin Boyd Tel : [illegible]
VENUE - Bob Hope Recreation Centre, R.A.F Mildenhall
MEETS - AMS conference room, Mildenhall base. Normally at weekends, check with Robin NOTE : Although the venue is on a service base it is not in a security restricted area so the club is open to interested parties.

LEICESTER GROUP

CONTACT - Bob Bown Tel : [illegible]
VENUE - Shakespeare Pub, Braunstone Lane, Leicester
MEETS - 7.30pm to 10.0pm on the first Wednesday of every month

MIDAPPLE

CONTACT - Dave Ward Tel : [illegible]
VENUE - I.T.E.C., Tildasley Street, West Bromwich, West Midlands
MEETS - 7.00pm on the second Friday of every month

THE MIDLAND MAC GROUP

CONTACT - Ivan Knezovich Tel : [illegible]
VENUE - Spring Grove House, West Midland Safari Park, Bewdley, Worcestershire.
MEETS - 8.00pm on the first Tuesday of every month

WEST MIDLANDS AMATEUR COMPUTER CLUB

CONTACT - John Tracey Tel : [illegible]
VENUE - Hill Crest School, Simms Lane, Netherton, Near Dudley.
MEETS - 7.00pm on the second and fourth Thursdays of each month.
NOTE - - This is not an Apple user club, it is a general interest club which welcomes users of all machines. There are currently two Apple user members.

North

BURNLEY APPLE USER GROUP

CONTACT - Rod Turnough Tel : [illegible]
VENUE - Michelin Sports Centre
MEETS - 2nd Wednesday of each month

CREW COMPUTER USER CLUB

CONTACT - Paul Edmonds
[illegible]
VENUE - Christ Church Hall, Crewe
MEETS - Fortnightly, Fridays, 7.30pm to 10.00pm
NOTE: this is a general interest group with Apple users among its members

HARROGATE AREA

CONTACT - Peter Sutton Tel : [illegible]
No active organised group in this area but there are a number of keen Apple users in contact with each other.

LIVERPOOL GROUP

CONTACT - Irene Flaxman Tel : [illegible]
VENUE - Check with Irene
MEETS - Second Monday of every month.

THE NORTH EAST APPLE COMPUTER CLUB

CONTACT - Philip Dixon Tel : [illegible]
VENUE - Apple Centre North East, Ponteland Road, Ponteland, Newcastle-on-Tyne
MEETS - First Wednesday of every month

THE NORTH WEST APPLE COMPUTER CLUB

CONTACT - Jim Leecy Tel: [illegible]
VENUE - Chetwode Arms, Lower Whitley, Warrington 2 miles south of M56 junction 10 on the A49
MEETS - Second Thursday of every month

THE NORTH WEST APPLE USERS GROUP
CONTACT - Max Parrot
Tel : [illegible]
Tel : [illegible]
VENUE -
MEETS - Ring Max

Scotland

EDINBURGH GROUP

CONTACT - Ricky Pollock Tel : [illegible]
VENUE -
MEETS - Meetings monthly, check with Ricky

Postal

APPLE II PROGRAMMERS CLUB

CONTACT - Philip Dixon TEL : [illegible]
VENUE - None established yet
MEETS - No meetings yet, has operated through postal newsletter published quarterly
NOTE : Philip started the club some time ago based on a membership fee of £1.00 to cover the cost of newsletters. Original intention was to concentrate on BASIC and Assembler programming.

Other Groups

ORPINGTON COMPUTER CLUB

CONTACT - Terry Wheeler Tel : [illegible]
VENUE - G.E.A. Hall, Woodhurst Avenue, Petworth
MEETS - Contact Terry

DONCASTER SOUTH YORKSHIRE

CONTACT - Colin Withington Tel : [illegible]
VENUE -
MEETS - Contact Colin

EAST ANGLIA GROUP

CONTACT - Gordon Freeman Tel - [illegible]
VENUE -
MEETS - Contact Gordon

LEEDS

CONTACT - Bob Miller Tel : [illegible]
- T Veluppillai Tel - [illegible]
VENUE -
MEETS - Contact Bob

COSTA BLANCA MACUSER GROUP

CONTACT - Clive Read
VENUE - H.T.R. Espana s.l., Edif. Bernia bajo local 8, c/. Juan de Juanes, Benissa (Alicante) Spain
MEETS - Last Wednesday of every month, 2pm - 4pm

If you want to start a group, find out about a group that might be near you, please write or contact John Lee the Local Group Organiser at the PO Box in Liverpool, or phone John Lee on [illegible].

If you are a local group organiser and have not been in touch with John Lee, please contact John with details of your group, or any changes there may be to the above details.

Members' Small Adverts are FREE. Please help us to help you. Send your advertisements to us on a disk, in Mac or Apple II text format. We will return the disk, of course. This saves us time, and avoids errors.

Members' Small Ads

Members Small Adverts are FREE. We reserve the right to edit and or omit them. They are placed in this Magazine in good faith. Apple2000 holds no responsibility over items advertised, and buyers purchase at their own risk.

WARNING: The sale of copied or pirated software is illegal.
Please ensure that items offered for sale are new or are re-registered.

WANTED

Programmer sought to develop an educational datalogging package (currently on IBM PC) for Apple IIe and GS.

'Phone: John Crellin (working hours) ..... [illegible]
(evenings) ..... [illegible]

FOR SALE

Apple IIe (128K enhanced) fitted with
2 Apple 5.25" floppy drives & disk controller card
Universal Disk Controller card (for two 3.5" floppy drives)
Mouse card (with mouse)
80 Column card with extended memory ..... **Package: £250**

Apple 12" green monitor (tilting), with dust cover
Apple monitor stand **£30**

Juki 6100 daisywheel printer, with dust cover
Parallel interface & cable, addl. daisywheels and ribbons ... **£60**

Epson MX80 F/T dot matrix printer
Parallel interface & cable, spare ribbon **£40**

Apple presents Apple; Sample Programmes; System Master;
AppleWriter II (Master and backup) ..... **(All Dos 3.3) Package £20**
AppleWorks 3.0 (as new) (ProDos) **£80**
Publish It 2 (as new) (ProDos) **£60**
ProDos Users Disk and Manual **£10**
UHF TV and sound modulator **£10**
3 x 5.25" floppy drive storage boxes and some blank disks **£10**

SPECIAL OFFER FOR THE LOT! £500
Prices do not include pstage.
If the above with original manuals and packaging (with the exception of one disk drive and Epson MX80.)

'Phone Ian ..... [illegible]

FOR SALE

Enhanced Apple //e system consisting of:-
4MHz Zipchip; Prodos clock; External fan/filter;
Grappler+ parallel printer interface;
Mockingboard stereo sound and speech card;
64Kbyte 80-column card; 1Mbyte Sprintdisk Ram board;
Apple mouse and interface; Joystick;
2 x 5.25" floppy disk drives plus interface;
3.5" Unidisk disk drive and interface;
Microvitec 14" colour monitor (has pal input for video recorders)

Also countless manuals, software packages, floppies, including:-
AppleWorks 3; Apple hardware + software manuals;
Timeouts; Beneath Apple Prodos; Prosel; AppleWriter;
Beagle compiler; various Beagle disks; Games; Copy 2 Plus;
Complete set of Open Apple/A2 Central on disks + newsletters;
Complete set of Timeout Central on disk; etc, etc, etc

Buyer collects £550

'Phone Terry (Leeds) ..... [illegible]

FOR SALE

IIc (128K), with external 5.25" drive, monitor with stand and mouse ..... **£300 o.n.o.**
Epson LX800 printer with serial interface ..... **£100 o.n.o.**

'Phone Alex Joia (evenings + weekends) ..... [illegible]
(office hours) ..... [illegible]

FOR SALE

EUROPLUS WITH DOUBLE DISC DRIVE, MONITOR, THERMAL PRINTER, LANGUAGE CARD **£100**
MACTABLET WITH STYLUS AND MASTER DISC 4.0 ..... **£100**
ABATON PROPOINT DIGITIAL CURSOR CONTROL FOR MAC . **£25**
SIMMS, 256X4 100nS, 2 CHIP VERSION **£5**
CORVUS NETWORK MANAGERS GUIDE AND NETWORK USERS GUIDE, MANUALS **£10**
A-B DATASWITCH **£5**

'PHONE S. HOLLINGSHURST ..... [illegible]

FOR SALE

Apple //c (128K), 80-col green screen monitr, twin drives
Epson LX80 printer plus Interface **£250**

'Phone Shaun ..... [illegible]

FOR SALE

ImageWriter II with colour ribbon **£250**

'Phone Adrian Price ..... [illegible]

FOR SALE

APPLE IIGS COLOUR SYSTEM
£585 complete, or will separate into:

Item	Number of items bought		
	1	2 or 3	4,5 or 6
IIGS(256K)+ kybrd + mouse	325	300	285
APPLE RGB MONITOR	100	90	80
APPLE 3.5" DRIVE	95	90	80
APPLE 5.25" DRIVE	55	50	45
APPLE 1meg RAM CARD	80	75	70
BUFFERED GRAPPLER PLUS	35	30	25

Will only sell separate items once the CPU is sold.
Prices do not include delivery. All items include manuals. All items are in excellent condition, careful home use only.

'Phone Jonathan Shippam ..... [illegible]

WANTED

Apple Macintosh computer — Classic HD2/40, LC or recent SE/30. Also, MacDraw disk (any version) preferably unregistered to use to upgrade to MacDraw PRO. Any other useful software for the Mac.

'Phone Jonathan Shippam ..... [illegible]

Advertisers' Index

A2 Central	18	Comtec	37
Bidmuthin Technologies Ltd	OBC	Holdens Computer Services	63
Blythe Software	IFC	LaserRecharge Ltd	69
Celtip Computers	IBC	MacLine	40,41
Clocktower	11,47	MGA SoftCat	23,39

Friendly Solutions at Celtip Computers AppleCentre℠ Kidderminster

- **DESKTOP PUBLISHING**
- **DTP PRESENTATIONS**
- **DATABASES**
- **COMPUTER AIDED DESIGN**
- **COMMS & NETWORKING**
- **FINANCIAL SYSTEMS**
- **MULTI MEDIA**
- **EDUCATIONAL**
- **TRAINING**
- **AGFA PREMIER DEALER**

Celtip Computers have been Apple™ dealers for almost 12 years, and in that time have gained extensive specialist knowledge of Apple™ computers. As operators of AppleCentre Kidderminster we are among the foremost computer and software suppliers in the Midlands, with a client base covering the UK. We offer service and support for the full range of Macintosh™ computers.

Macintosh Personal Computers Start at £575
and Apple Printers Start at £295

The new low-cost Macintosh LC when equipped with an Apple IIe™ Card will allow you to run virtually all existing Apple IIe software.
Contact Sales today for further information

Celtip Computers : AppleCentre Kidderminster

Lower Mill Street, Kidderminster, Worcs, DY10 2JG

Tel: 0562 822222, Fax: 0562 67202

™

Authorised Apple™ Dealer
Apple Authorised Training Centre
Apple Authorised Education Dealer

AUTHORISED DEALERS FOR:
Apple, Agfa, Radius, Aldus, Claris, Microsoft, Adobe, Quark, ACI, Mac School, Letraset, Tektronix, QueFax, GCC, Access Accounts, Roland, Rodime, Bitstream

AppleCentre is a service mark of Apple Computer, Inc.

BIDMUTHIN TECHNOLOGIES

Apple II/Mac Specialists

CORPORATE POWER FOR SMALL BUSINESSES

Bidmuthin Technologies Ltd. is one of the best Level 1 Apple Service Centres in the country. Our fast, friendly and efficient service department is growing rapidly and **all our service staff are trained by Apple (UK) Ltd.**
We can offer you complete Macintosh systems at competitive prices, as well as a first class after sales and repair service ...from reviving a dead mouse - to rectifying a complete systems failure. Enquiries on 081-868 4400

• AUTHORISED APPLE DEALER • AUTHORISED APPLE II DEALER • AUTHORISED EDUCATIONAL DEALER • MACINTOSH SYSTEMS TO SUIT ALL REQUIREMENTS • NETWORKS - SET UP AND TROUBLE-SHOOTING • DATA TRANSLATION • MAINTENANCE CONTRACTS • UPGRADES • FULLY TRAINED ENGINEERS • MAC WORKSHOPS

Bidmuthin Technologies Ltd., Chase House, The Chase, Pinner, Middlesex, HA5 5RX. Tel: 081-868 4400